

The Journal of Borderland Research

VOLUME XLIV, No. 1

January-February 1988

TABLE OF CONTENTS

FAMOUS SCIENTIFIC ILLUSIONS

Nikola Tesla {1-6}

THE PULSING INNER GOD

Sarosh Dinshah Ghadiali {7}

OLD ELECTROTHERAPEUTIC DEVICES

Jorge Resines {8-11}

FUND ENERGY MEDICINE RESEARCH NOW

Jeff Smith {12-13}

HYSTERESIS OF THE AETHER

Eric P. Dollard {13}

AQUALITHIA

Haroldine {14-15}

THE NEGATIVE INFLUENCE OF WATER VEINS, Part II

Zbigniew Wisniewski {16-25}

THE STORY OF THE 13th ASTROLOGICAL SIGN

Dr. W.G. Reimer and Art Yensen {26}

CLIPS, QUOTES & COMMENTS

- * Solar Update - Is The Sun Hollow? *
- * Solar Cycle 22 Predictions * View From
The Borderland * Electropherics *
- * Ominous OMNI * Two Dimensional Sculptures *
- * Screw Clouds * Vitic * Eeman Update *
- * BSRF Update * Books For Listening Update *
- * Contacts * Free Energy Research *
- * Sanctuary Forest * {27-36}

THE JOURNAL OF BORDERLAND RESEARCH is a publication of Borderland Sciences Research Foundation, Inc., P.O. Box 429, Garberville, California 95440-0429 USA. Phone: (707) 986-7211 The Journal is edited and assembled by Thomas Joseph Brown, Director of BSRF, and is published six issues a year (bi-monthly) with the assistance of the BSRF Associates. The Journal is issued to members of BSRF.

THE JOURNAL OF BORDERLAND RESEARCH is a Free-Thought Scientific Forum examining the Living Energy of Our Creator and probing the parameters of Body, Mind and Spirit. Current research is oriented toward verification of Etheric Energies and their relationship to Beneficial Technologies. Donations of pertinent material are accepted for publication in the Journal. By presenting your work you will be helping other Researchers into the Borderlands of Science and we all benefit.

BORDERLAND SCIENCES RESEARCH FOUNDATION, Inc. is a non-profit organization (California State Charter) of people who take an active interest in observation of their Physical, Mental and Spiritual environment Personally, Globally, and Universally. Subjects of inquiry on this Borderland between the Visible and Invisible Manifestations of Reality include: Archetypal Forms and Forces of Nature and the Use of the Imagination and Intuition to Percieve Them, Ether Physics, Light and Color, Radionics and Radiesthesia, Orgone Energy, Tesla & The True Wireless, Viktor Schauberger's Water Technology, Initiation Science, Dowsing, Hollow Earth Theories, Anomalies and Fortean Phenomenon, Hypnosis, Photography of the Invisible and Unidentified Flying Objects. The Directorship of BSRF is Thomas Joseph Brown, President. Peter A. Lindemann is Vice-President. Alison Davidson is Secretary-Treasurer.

MEMBERSHIP in BORDERLAND SCIENCES RESEARCH FOUNDATION is \$20/US worldwide, with the Journal shipped surface rate. Supporting membership is \$25 or more a year. Add \$10 for Air Mail or First Class postage on the Journal. Membership entitles you to discounts on research publications and products available through BSRF's mail order service. Send \$1 for current catalog.

Borderland Sciences Research Foundation was founded by N. Meade Layne in February 1945 with the issuance of the first ROUND ROBIN, original title to The Journal of Borderland Research. The Foundation is Incorporated under California Law, May 21, 1951 and has been in continuous existence since then. Meade Layne directed BSRF from 1945 to 1959. Riley Hansard Crabb was Director from 1959 to 1985. Riley published a proliferation of material and is still actively researching, writing and lecturing in New Zealand.

The Main Function of BSRF is to act as a clearinghouse for information. BSRF is chartered to accept donations to further Research into the Borderlands of Science. Active research is being carried out and results are published in The Journal of Borderland Research. The majority of available funds for BSRF expenses come from sales of Research Publications and Membership fees.

ALL INFORMATION is presented for Informational and Research purposes only. Authors are solely responsible for the opinions they present. In no way are BSRF books or equipment to be taken as medical advice or instrumentation. We are not qualified to give medical advice and we do not want to promote any false hopes, where one may neglect professional medical care. We fully support a person's GOD-given right to research and investigate for themselves. We support the questioning of authority. BSRF functions on the Universal Principle of the Free Flow of Information and we stand on our U.S. Constitutional Rights of Freedom of Speech and Freedom of the Press!

Famous Scientific Illusions

By NIKOLA TESLA

Written specially for the Electrical Experimenter

In this original and revolutionizing discussion, Nikola Tesla gives us something really new to think about. First—Does the moon rotate on its axis? Second—Is the Franklin pointed lightning rod correct in theory and operation? Third—Do wireless signals fly thru space by means of so-called Hertzian waves in the ether, or are they propagated thru the earth at prodigious velocity by means of earth-bound oscillations? World-famous conundrums these—questions which have been answered in many ways by some of the greatest scientists. Dr. Tesla explains these three predominant scientific fallacies in a masterly way, so that everyone can understand them.

THE human brain, with all its wonderful capabilities and power, is far from being a faultless apparatus. Most of its parts may be in perfect working order, but some are atrophied, undeveloped or missing altogether. Great men of all classes and pro-

electric current according to a childish simple rule. The writer, who was known to recite entire volumes by heart, has never been able to retain in memory and recapitulate in their proper order the words designating the colors of the rainbow, and can only ascertain them after long and la-

reality. The greatest triumphs of man were those in which his mind had to free itself from the influence of delusive appearances. Such was the revelation of Buddha that self is an illusion caused by the persistence and continuity of mental images; the discovery of Copernicus that,

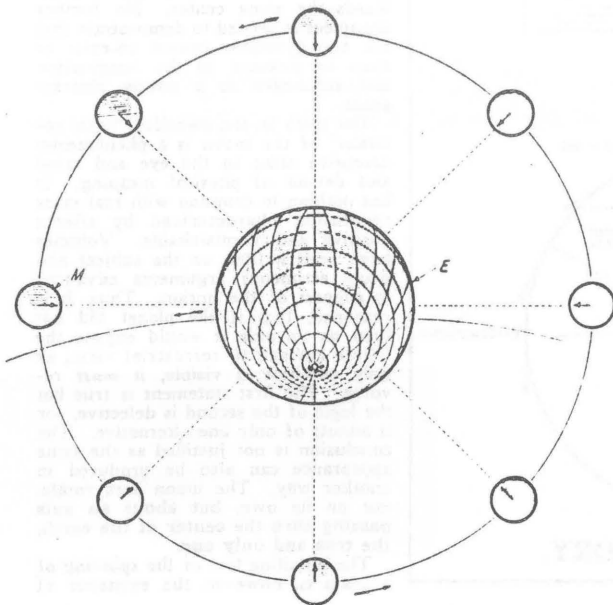


Fig. 1

It is Well Known That the Moon, M , Always Turns the Same Face Toward the Earth, E , as the Black Arrows Indicate. The Parallel Rays From the Sun Illuminate the Moon in Its Successive Orbital Positions as the Unshaded Semi-circles Indicate. Bearing This in Mind, Do You Believe That the Moon Rotates on Its Own Axis?

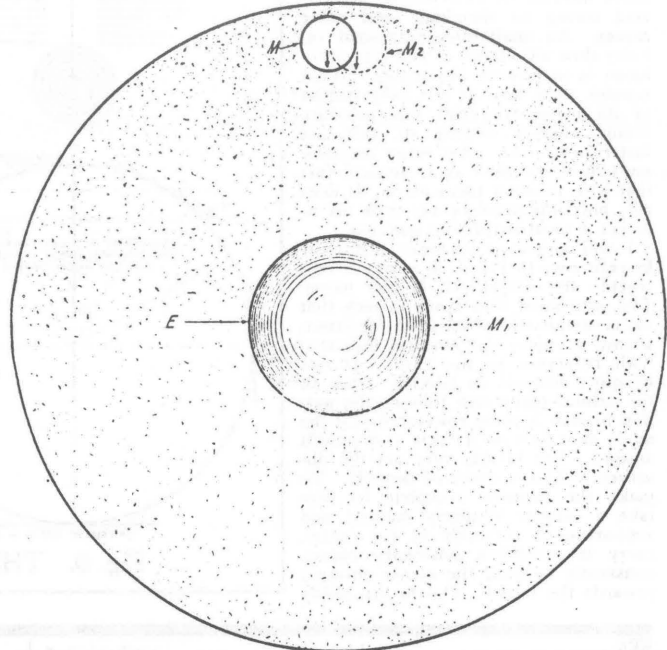


Fig. 2.—Tesla's Conception of the Rotation of the Moon, M , Around the Earth, E ; the Moon, in This Demonstration Hypothesis, Being Considered as Embedded in a Solid Mass, M . If, As Commonly Believed, the Moon Rotates, This Would Be Equally True For a Portion of the Mass M , and the Part Common to Both Bodies Would Turn Simultaneously in "Opposite" Directions.

fessions—scientists, inventors, and hard-headed financiers—have placed themselves on record with impossible theories, inoperative devices, and unrealizable schemes. It is doubtful that there could be found a single work of any one individual free of error. There is no such thing as an infallible brain. Invariably, some cells or fibers are wanting or unresponsive, with the result of impairing judgment, sense of proportion, or some other faculty. A man of genius eminently practical, whose name is a household word, has wasted the best years of his life in a visionary undertaking. A celebrated physicist was incapable of tracing the direction of an

aborious thought, strange as it may seem.

Our organs of reception, too, are deficient and deceptive. As a semblance of life is produced by a rapid succession of inanimate pictures, so many of our perceptions are but trickery of the senses, devoid of

contrary to all observation, this planet rotates around the sun; the recognition of Descartes that the human being is an automaton, governed by external influence and the idea that the earth is spherical, which led Columbus to the finding of this continent. And tho the minds of individuals supplement one another and science and experience are continually eliminating fallacies and misconceptions, much of our present knowledge is still incomplete and unreliable. We have sophisms in mathematics which cannot be disproved. Even in pure reasoning, free of the shortcomings of symbolic processes, we are often arrested by doubt which the strong-

FOR over a century and a half the whole world, educated and otherwise, thought that the moon revolved around its axis. Nikola Tesla in the present highly instructive article disproves that theory and will convince scientists and all others alike that the moon does no such thing.

For thousands of years it was thought that the sun and stars revolved around the earth and all kinds of experimental proofs were furnished to substantiate this theory. The illustrious Galileo thought different, and everyone today knows that the earth revolves around the sun.

So it is with Tesla's discovery. Tesla also, in the second part of the present paper, shows us that the ancient and time-worn theory advanced by Benjamin Franklin as to the lightning conductor is not substantially correct as viewed by latter day science. It will come as a shock even to our professors that the lightning rod actually aids the lightning in hitting the building. The reason is that the lightning rod helps in ionizing (making conductive) the surrounding air.

Mr. Tesla has devised a lightning conductor with no points, and there is no doubt whatsoever that his theory is right. Scientists the world over will acknowledge this very shortly. In a third section of the same paper Tesla explodes still another popular delusion, viz., that wireless waves follow the curvature of the earth when messages are transmitted, let us say from a point in the United States to a point in Europe. In his revolutionary arguments, supported by facts as well as by logic, Tesla shows why the currents do not travel around the earth but directly thru it. In other words, Tesla maintains that wireless communication is accomplished ONLY thru the medium of the earth itself. His contention seems very sound. If it were not so, let every wireless station, commercial or otherwise, do away with its ground connection. None could then operate as is well known, except perhaps over very limited distances.

Mr. Tesla's present article will arouse world-wide comment due to the revolutionary philosophy contained therein. We are sure our readers will appreciate Mr. Tesla's most timely and illuminating article on this but little understood subject.

Copyright, 1919, by E. P. Co. All rights reserved.

est intelligences have been unable to dispel. Experimental science itself, most positive of all, is not unfailing.

In the following I shall consider three exceptionally interesting errors in the interpretation and application of physical phenomena which have for years dominated the minds of experts and men of science.

I. The Illusion of the Axial Rotation of the Moon.

It is well known since the discovery of Galileo that the moon, in travelling thru space, always turns the same face towards the earth. This is explained by stating that while passing once around its mother-planet the lunar globe performs just one revolution on its axis. The spinning motion of a heavenly body must necessarily undergo modifications in the course of time, being either retarded by resistances internal or external, or accelerated owing to shrinkage and other causes. An unalterable rotational velocity thru all phases of planetary evolution is manifestly impossible. What wonder, then, that at this very instant of its long existence our satellite should revolve exactly so, and not faster or slower. But many astronomers have accepted as a physical fact that such rotation takes place. It does not, but only appears so; it is an illusion, a most surprising one, too.

I will endeavor to make this clear by reference to Fig. 1, in which E represents the earth and M the moon. The movement thru space is such that the arrow, firmly attached to the latter, always occupies the position indicated with reference to the earth. If one imagines himself as looking down on the orbital plane and follows the motion he will become convinced that the moon *does* turn on its axis as it travels around. But in this very act the observer will have deceived himself. To make the delusion complete let him take a washer similarly marked and supporting it rotatably in the center, carry it around a stationary object, constantly keeping the arrow pointing towards the latter. Tho to his bodily

vision the disk will revolve on its axis, such movement does not exist. He can dispel the illusion at once by holding the washer fixedly while going around. He will now readily see that the supposed axial rotation is only apparent, the impression being produced by successive changes of position in space.

But more convincing proofs can be given that the moon does not, and cannot revolve on its axis. With this object in view attention is called to Fig. 2, in which both the satellite, M, and earth, E, are shown embedded in a solid mass, M₁ (indicated by stippling) and supposed to rotate so as to impart to the moon its normal translatory velocity. Evidently, if the lunar globe could rotate as commonly believed, this would be equally true of any other portion of mass M₁, as the sphere M₂, shown in dotted lines, and then the part common to both bodies would have to turn *simultaneously in opposite directions*. This can be experimentally illustrated in the manner suggested by using instead of one, two overlapping rotatable washers, as may be conveniently represented by circles M and M₂, and carrying them around a center as E, so that the plain and dotted arrows are always pointing towards the same center. No further argument is needed to demonstrate that the two gyrations cannot co-exist or even be pictured in the imagination and reconciled in a purely abstract sense.

The truth is, the so-called "axial rotation" of the moon is a phenomenon deceptive alike to the eye and mind and devoid of physical meaning. It has nothing in common with real mass revolution characterized by effects positive and unmistakable. Volumes have been written on the subject and many erroneous arguments advanced in support of the notion. Thus, it is reasoned, that if the planet did *not* turn on its axis it would expose the whole surface to terrestrial view; as only one-half is visible, it *must* revolve. The first statement is true but the logic of the second is defective, for it admits of only one alternative. The conclusion is not justified as the same appearance can also be produced in another way. The moon does rotate, not on its own, but about an axis passing thru the center of the earth, the true and only one.

The unailing test of the spinning of a mass is, however, the existence of

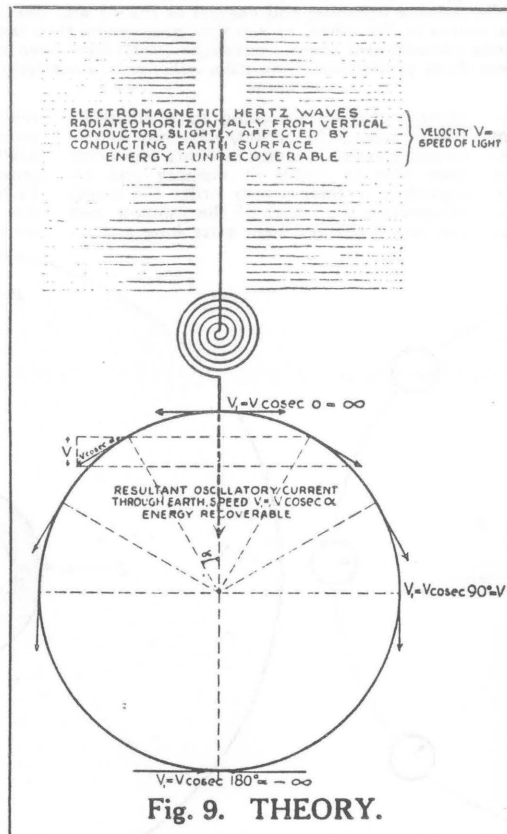
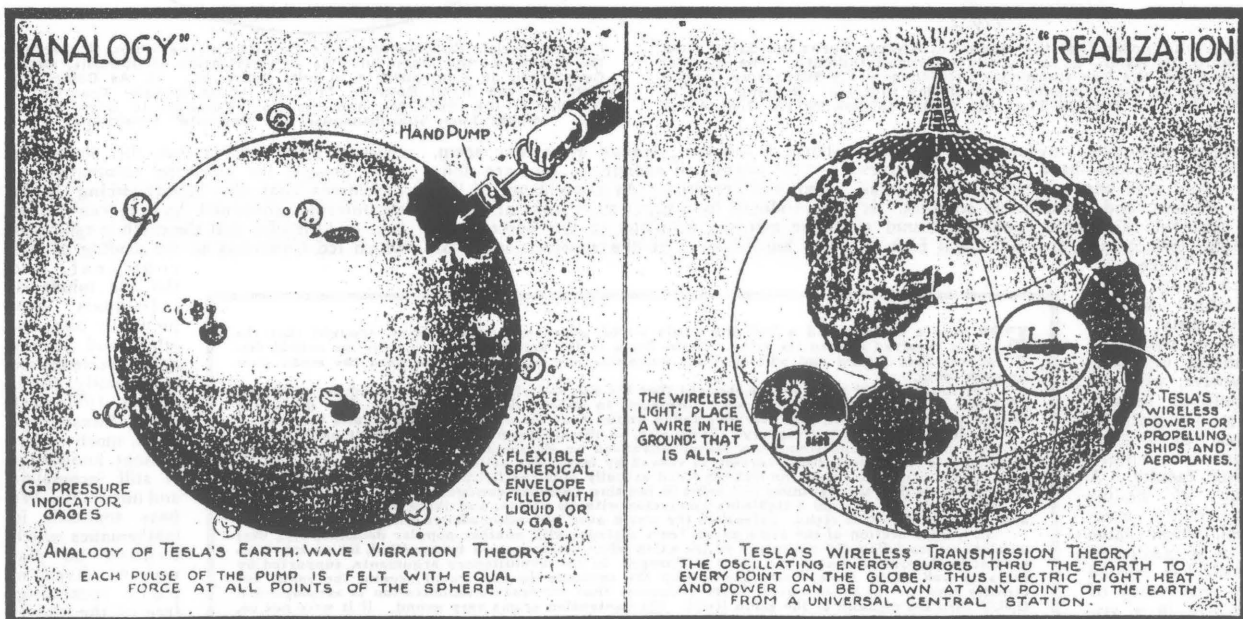


Fig. 9. THEORY.



Tesla's World-Wide Wireless Transmission of Electrical Signals, As Well As Light and Power, Is Here Illustrated in Theory, Analogy and Realization. Tesla's Experiments With 100 Foot Discharges At Potentials of Millions of Volts Have Demonstrated That the Hertz Waves Are Infinitesimal In Effect and Unrecoverable; the Recoverable Ground Waves of Tesla Fly "Thru the Earth". Radio Engineers Are Gradually Beginning to See the Light and That the Laws of Propagation Laid Down by Tesla Over a Quarter of a Century Ago Form the Real and True Basis of All Wireless Transmission To-Day.

energy of motion. The moon is not posses of such *vis viva*. If it were the case then a revolving body as M_1 would contain mechanical energy other than that of which

tion of the latter immediately stiffens, being at the same time deformed by gravitational pull. The shape becomes permanent upon cooling and solidification and the smaller

show any measurable flattening in form.

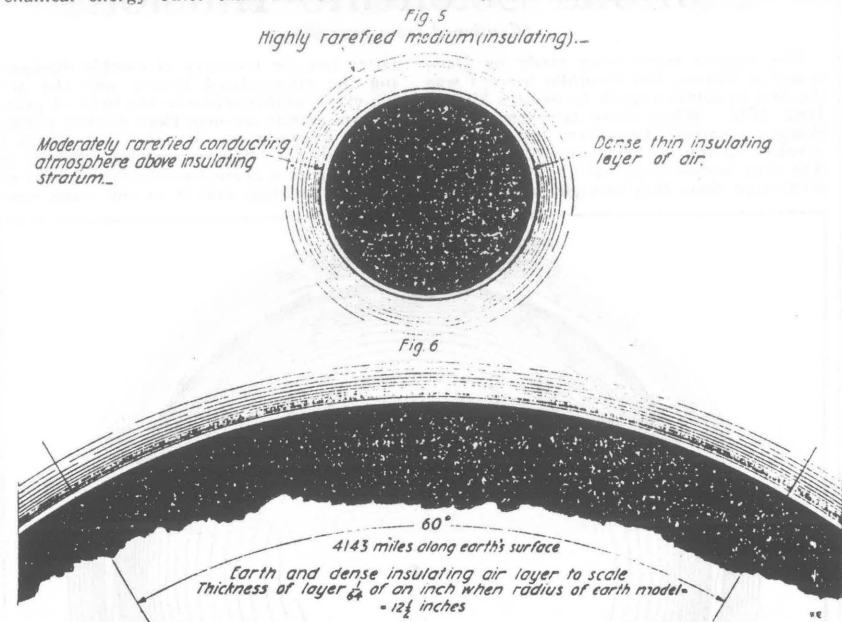
2. If a planetary body in its orbital movement turns the same side towards the central mass this is a positive proof that it has been separated from the latter and is a true satellite.

3. A planet revolving on its axis in its passage around another cannot have been thrown off from the same but must have been captured.

II. The Fallacy of Franklin's Pointed Lightning-Rod.

The display of atmospheric electricity has since ages been one of the most marvelous spectacles afforded to the sight of man. Its grandeur and power filled him with fear and superstition. For centuries he attributed lightning to agents god-like and supernatural and its purpose in the scheme of this universe remained unknown to him. Now we have learned that the waters of the ocean are raised by the sun and maintained in the atmosphere delicately suspended, that they are wafted to distant regions of the globe where electric forces assert themselves in upsetting the sensitive balance and causing precipitation, thus sustaining all organic life. There is every reason to hope that man will soon be able to control this life-giving flow of water and thereby solve many pressing problems of his existence.

Atmospheric electricity became of special scientific interest in Franklin's time. Faraday had not yet announced his epochal discoveries in magnetic induction but static frictional machines were already generally used in physical laboratories. Franklin's powerful mind at once leaped to the conclusion that frictional and atmospheric electricity were identical. To our present view this inference appears obvious, but in his time the mere thought of it was little short of blasphemy. He investigated the phenomena and argued that if they were of the same nature then the clouds could be drained of their charge exactly as the ball of a static machine, and in 1749 he indicated in a published memoir how this could be done by the use of pointed metal rods. (Continued on page 728)



A Section of the Earth and Its Atmospheric Envelope Drawn to Scale. It Is Obvious That the Hertzian Rays Cannot Traverse So Thin a Crack Between Two Conducting Surfaces For Any Considerable Distance, Without Being Absorbed, Says Dr. Tesla, in Discussing the Ether Space Wave Theory.

we have experimental evidence. Irrespective of this so exact a coincidence between the axial and orbital periods is, in itself, immensely improbable for this is not the permanent condition towards which the system is tending. Any axial rotation of a mass left to itself, retarded by forces external or internal, must cease. Even admitting its perfect control by tides the coincidence would still be miraculous. But when we remember that most of the satellites exhibit this peculiarity, the probability becomes infinitesimal.

Three theories have been advanced for the origin of the moon. According to the oldest suggested by the great German philosopher Kant, and developed by Laplace in his monumental treatise "Mécanique Céleste", the planets have been thrown off from larger central masses by centrifugal force. Nearly forty years ago Prof. George H. Darwin in a masterful essay on tidal friction furnished mathematical proofs, deemed unrefutable, that the moon had separated from the earth. Recently this established theory has been attacked by Prof. T. J. J. See in a remarkable work on the "Evolution of the Stellar Systems", in which he propounds the view that centrifugal force was altogether inadequate to bring about the separation and that all planets, including the moon, have come from the depths of space and have been captured. Still a third hypothesis of unknown origin exists which has been examined and commented upon by Prof. W. H. Pickering in "Popular Astronomy of 1907", and according to which the moon was torn from the earth when the later was partially solidified, this accounting for the continents which might not have been formed otherwise.

Undoubtedly planets and satellites have originated in both ways and, in my opinion, it is not difficult to ascertain the character of their birth. The following conclusions can be safely drawn:

1. A heavenly body thrown off from a larger one cannot rotate on its axis. The mass, rendered fluid by the combined action of heat and pressure, upon the reduc-

mass continues to move about the larger one as tho it were rigidly connected to it except for pendular swings or librations due to varying orbital velocity. Such motion precludes the possibility of axial rotation in the strictly physical sense. The moon has never spun around as is well demonstrated by the fact that the most precise measurements have failed to

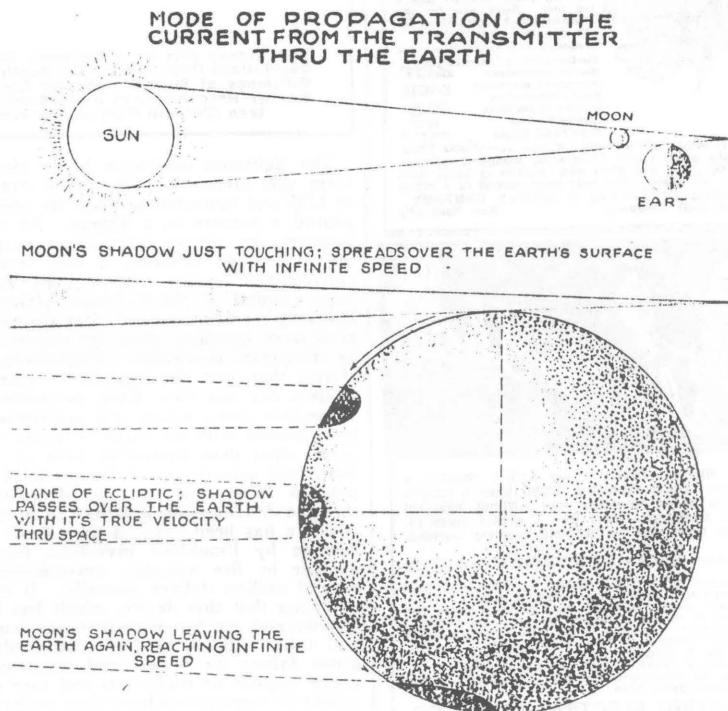


Fig. 8.—This Diagram Illustrates How, During a Solar Eclipse, the Moon's Shadow Passes Over the Earth With Changing Velocity, and Should Be Studied in Connection With Fig. 9. The Shadow Moves Downward With Infinite Velocity at First, Then With Its True Velocity Thru Space, and Finally With Infinite Velocity Again.



BE A BOY CHEMIST

Test water, foods and other things you use and wear. Make soap, ink, dye, fire-proof cloth and wood, and work hundreds of useful, fascinating experiments just like a real chemist. Perform weird, puzzling tricks of chemical magic. You can, with "CHEMCRAFT". Outfits contain all chemicals and laboratory supplies to work each experiment many times; also a Manual of Instruction. "CHEMCRAFT" is absolutely harmless; made by a practical chemist and is scientifically correct.

Chemcraft No. 1—\$1.50
West of Mississippi River and in Canada—\$2.00
Chemcraft No. 2—\$3.00
West of Mississippi River and in Canada—\$3.50
Chemcraft No. 3—\$5.00
West of Mississippi River and in Canada—\$6.00

Be sure you get "CHEMCRAFT," the original and most complete and scientific chemical outfit. Ask for it by name at your Toy Store, or send price and we will deliver direct prepaid.

THE PORTER CHEMICAL CO.
Industrial Bldg., W. Washington St.
Hagerstown Maryland



BOYS Build and Fly Your Own Training Plane

Train yourself in Aviation. Be an Amateur Aviator with an Aeroplane of your own. Learn how Aeroplanes are built; learn the principles of construction, operation and control. We sell IDEAL Accurate Scale Drawings, and Building and Flying Instructions which show you how to build a perfect Model Aeroplane, 3 ft. size, that will rise from the ground by its own power and fly like a big one. Send now for the Drawings and Instructions for the one you want to build. Drawings and Instructions for
Curtiss Military Trainer 25c
Bleriot Monoplane EACH
Nieuport Monoplane EACH
Toussie Monoplane EACH
Curtiss Flying Boat Set of
Wright Biplane \$1.50
Cecil Feill Racer postpaid

Ideal Model Aeroplane Catalogue—None Free
Tells about Model Aeroplanes, Racing Aeroplanes, Flying Toys, and parts and supplies to build them with. 48 pages. Sent only upon receipt of 5 cents.
IDEAL AEROPLANE & SUPPLY COMPANY
78-82 West Broadway New York City



The Electric Safety razor makes shaving a pleasure. Blade vibrating 7,200 times a minute cuts the beard smoothly and without slightest pull or irritation—feels like a gentle massage. Can be used with or without electric current.

All users of the **Lek-Tro-Shav** speak well of it.

A barber says—"Have shaved for years and have never used any shaving device near its equal."
A home user says—"The most pleasing shave I've ever had in my life. Shaves my face closer than I used to shave, but there is no after irritation or ill effects as I usually get from another razor."

No. 1 Made for use from Light Socket.
No. 2 Made for use from Dry Battery.

Write for Illustrated circular describing Lek-Tro-Shav Safety Razor fully.
VIBRATING ELECTRIC RAZOR CO.
Dept. 122, Omaha, Nebr.

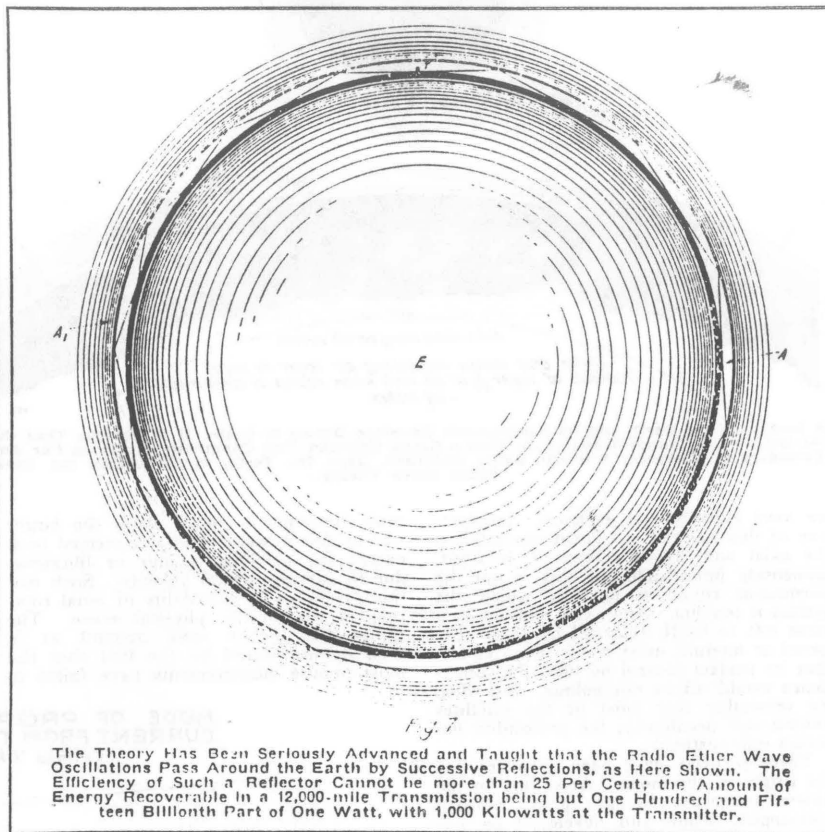
Printing Cheap
Cards, circulars, labels, book, paper. Press 5c. Larger \$20 Job press \$5 up. Save money. Print for others, big profit. All easy, rules sent. Write factory for prospectus, TYPE, cards, paper. **THE PRESS CO.** D-47 Meriden, Conn.

Famous Scientific Illusions

(Continued from page 694)

The earliest trials were made by Dalibrand in France, but Franklin himself was the first to obtain a spark by using a kite, in June, 1752. When these atmospheric discharges manifest themselves today in our wireless station we feel annoyed and wish that they would stop, but to the man who discovered them they brought tears of joy.

latter has the property of quickly dissipating the accumulated charge into the air. To examine this action in the light of present knowledge we may liken electric potential to temperature. Imagine that sphere s is heated to T degrees and that the pin or metal bar is a perfect conductor of heat so that its extreme end is at the same tem-



The Theory Has Been Seriously Advanced and Taught that the Radio Ether Wave Oscillations Pass Around the Earth by Successive Reflections, as Here Shown. The Efficiency of Such a Reflector Cannot be more than 25 Per Cent; the Amount of Energy Recoverable in a 12,000-mile Transmission being but One Hundred and Fifteen Billionth Part of One Watt, with 1,000 Kilowatts at the Transmitter.

The lightning conductor in its classical form was invented by Benjamin Franklin in 1755 and immediately upon its adoption proved a success to a degree. As usual, however, its virtues were often exaggerated. So, for instance, it was seriously claimed that in the city of Pietermaritzburg (capital of Natal, South Africa) no lightning strokes occurred after the pointed rods were installed, altho the storms were as frequent as before. Experience has shown that just the opposite is true. A modern city like New York, presenting innumerable sharp points and projections in good contact with the earth, is struck much more often than equivalent area of land. Statistical records, carefully compiled and published from time to time, demonstrate that the danger from lightning to property and life has been reduced to a small percentage by Franklin's invention, but the damage by fire amounts, nevertheless, to several million dollars annually. It is astonishing that this device, which has been in universal use for more than one century and a half, should be found to involve a gross fallacy in design and construction which impairs its usefulness and may even render its employment hazardous under certain conditions.

For explanation of this curious fact I may first refer to Fig. 3, in which s is a metallic sphere of radius r , such as the capacity terminal of a static machine, provided with a sharply pointed pin of length h , as indicated. It is well known that the

perature T . Then if another sphere of larger radius, v , is drawn about the first and the temperature along this boundary is T_1 , it is evident that there will be between the end of the bar and its surrounding a difference of temperature $T - T_1$, which will determine the outflow of heat. Obviously, if the adjacent medium was not affected by the hot sphere this temperature difference would be greater and more heat would be given off. Exactly so in the electric system. Let q be the quantity of the charge, then the sphere—and owing to its great conductivity also the pin—will be at

the potential $\frac{q}{r}$. The medium around the

point of the pin will be at the potential

$\frac{q}{r+h}$ and, consequently, the differ-

ence $\frac{q}{r} - \frac{q}{r+h} = \frac{qh}{r(r+h)}$. Suppose now

that a sphere S of much larger radius

$R = nr$ is employed containing a charge Q

this difference of potential will be, analog-

ously $\frac{Qh}{R(R+h)}$. According to elementary

principles of electro-statics the potentials

of the two spheres s and S will be equal if

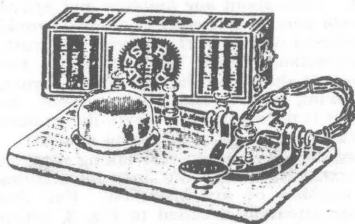
$Q = nq$ in which case $\frac{Qh}{R(R+h)} = \frac{q}{r}$

(Continued on page 730)

You benefit by mentioning the "Electrical Experimenter" when writing to advertisers.

Mesco Telegraph Practice Set

For Learning Telegraph Codes



The Practice Set comprises a regular telegraph key, without circuit breaker, a special high pitch buzzer, one cell Red Seal Dry Battery, and four feet of green silk covered flexible cord.

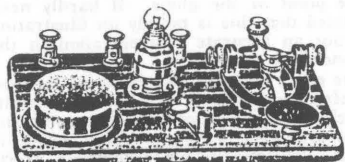
The key and buzzer are mounted on a highly finished wood base, and three nickel plated binding posts are so connected that the set may be used for five different purposes. List No. 342

Telegraph Practice Set, with Battery and Cord.....\$3.24

Weights 4 lbs. packed.

Price does not include postage.

MESCO Combination Practice Set for learning the Morse and Continental Visual and Audible Codes



This outfit is the only reliable instrument which will enable students to become proficient operators in the U. S. Naval Service, because it is equipped with a buzzer and miniature lamp enabling the user to master both the visual and audible signals quickly.

List No. 52—Practice Set with Red Seal Battery and Cord.....\$4.09

Weights 4 lbs. packed.

Price does not include postage.

Send for the New Edition of Our Catalog W28

It is pocket size, contains 248 pages, with over 1,000 illustrations, and describes in plain, clear language all about Bells, Push Buttons, Batteries, Telephone and Telegraph Material, Electric Toys, Burglar and Fire Alarm Contrivances, Electric Call Bells, Electric Alarm Clocks, Medical Batteries, Motor Boat Horns, Electrically Heated Apparatus, Battery Connectors, Switches, Battery Gauges, Wireless Telegraph Instruments, Ignition Supplies, etc.

Send for the Catalog Now

Manhattan Electrical Supply Co., Inc.

NEW YORK: 17 Park Place CHICAGO: 114 S. Wells St. ST. LOUIS: 1106 Pine St.
San Francisco Office: 504 Mission St.

With the consent of **NIKOLA TESLA**

We have prepared a genuine, handsome photograph, autographed in facsimile by the great inventor. This photograph, taken in December, 1918, was posed especially for the cover design of the February, 1919, issue of the "Electrical Experimenter". It shows Tesla as he is today, holding his famous wireless-lighted globe. No advertising whatsoever on this photo, except for the autograph. Size about 9 x 12". Ready for framing. A striking picture of the world's greatest inventor for your den, library, laboratory, workshop or radio station. Sent prepaid in strong cardboard tube. Price \$1.00.

EXPERIMENTER PUBLISHING CO.
231 Fulton St. Book Department N. Y. City

FAMOUS SCIENTIFIC ILLUSIONS.

(Continued from page 728)

$$\frac{nqh}{nr(nr+h)} = \frac{qh}{r(nr+h)}$$
 Thus the difference of potential between the point of the pin and the medium around the same

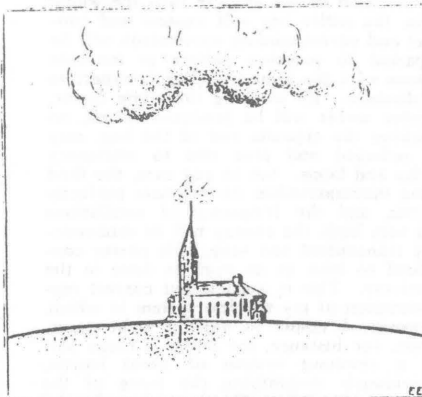


Fig. 4. *Tesla Explains the Fallacy of the Franklin Pointed Lightning Rod, Here Illustrated, and Shows that Usually Such a Rod Could Not Draw Off the Electricity in a Single Cloud in Many Years. The Density of the Dots Indicates the Intensity of the Charges.

will be smaller in the ratio $\frac{r+h}{nr+h}$ when

the large sphere is used. In many scientific tests and experiments this important observation has been disregarded with the result of causing serious errors. Its significance is that the behavior of the pointed rod entirely depends on the linear dimensions of the electrified body. Its quality to give off the charge may be entirely lost if the latter is very large. For this reason, all points or projections on the surface of a conductor of such vast dimensions as the earth would be quite ineffective were it not for other influences. These will be elucidated with reference to Fig. 4, in which our artist of the Impressionist school has emphasized Franklin's notion that his rod was drawing electricity from the clouds. If the earth were not surrounded by an atmosphere which is generally oppositely charged it would behave, despite all its irregularities of surface, like a polished sphere. But owing to the electrified masses of air and cloud the distribution is greatly modified. Thus in Fig. 4,

the positive charge of the cloud induces in the earth an equivalent *opposite* charge, the density at the surface of the latter diminishing with the cube of the distance from the static center of the cloud. A brush discharge is then formed at the point of the rod and the action Franklin anticipated takes place. In addition, the surrounding air is ionized and rendered conducting and, eventually, a bolt may hit the building or some other object in the vicinity. The virtue of the pointed end to dissipate the charge, which was uppermost in Franklin's mind is, however, infinitesimal. Careful measurements show that it would take many years before the electricity stored in a single cloud of moderate size would be drawn off or neutralized thru such a lightning conductor. The grounded rod has the quality of rendering harmless most of the strokes it receives, tho occasionally the charge is diverted with damaging results. But, what is very important to note, it invites danger and hazard on account of the fallacy involved in its design. The sharp point which was thought advantageous and indispensable to its operation, is really a defect detracting considerably from the practical value of the device. I have produced a much improved form of lightning protector characterized by the employment of a terminal of considerable area and large radius of curvature which makes impossible undue density of the charge and ionization of the air.* These protectors act as quasi-repellents and so far have never been struck tho exposed a long time. Their safety is experimentally demonstrated to greatly exceed that invented by Franklin. By their use property worth millions of dollars which is now annually lost, can be saved.

III. The Singular Misconception of the Wireless.

To the popular mind this sensational advance conveys the impression of a single invention but in reality it is an art, the successful practise of which involves the employment of a great many discoveries and improvements. I viewed it as such when I undertook to solve wireless problems and it is due to this fact that my insight into its underlying principles was clear from their very inception.

In the course of development of my induction motors it became desirable to operate them at high speeds and for this purpose I constructed alternators of relatively

*Refer to the October, 1918, issue of this journal wherein Dr. Tesla's new form of non-pointed lightning rod was fully described and illustrated.

(Continued on page 732)

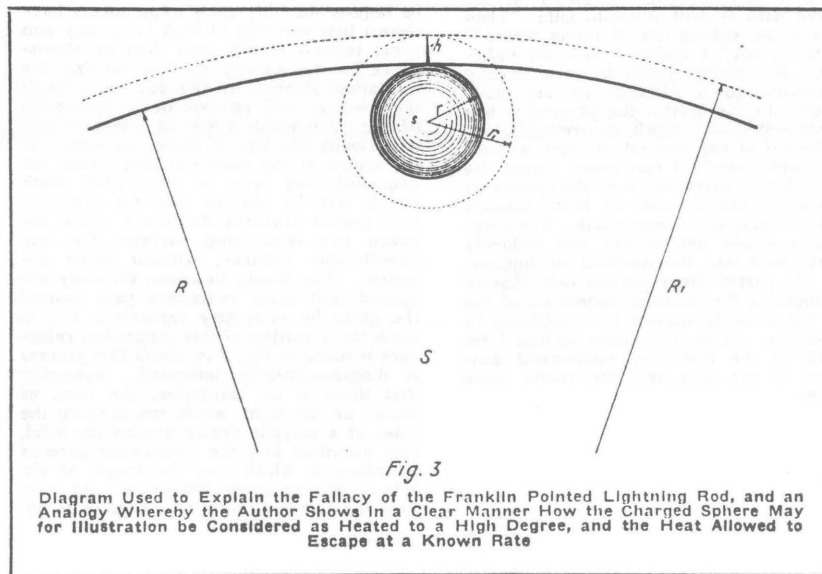


Diagram Used to Explain the Fallacy of the Franklin Pointed Lightning Rod, and an Analogy Whereby the Author Shows in a Clear Manner How the Charged Sphere May for Illustration be Considered as Heated to a High Degree, and the Heat Allowed to Escape at a Known Rate

You benefit by mentioning the "Electrical Experimenter" when writing to advertisers.

FAMOUS SCIENTIFIC ILLUSIONS

(Continued from page 730)

high frequencies. The striking behavior of the currents soon captivated my attention and in 1889 I started a systematic investigation of their properties and the possibilities of practical application. The first gratifying result of my efforts in this direction was the transmission of electrical energy thru *one wire* without return, of which I gave demonstrations in my lectures and addresses before several scientific bodies here and abroad in 1891 and 1892. During that period, while working with my oscillation transformers and dynamos of frequencies up to 200,000 cycles per second, the idea gradually took hold of me that the earth might be used in place of the wire, thus dispensing with artificial conductors altogether. The immensity of the globe seemed an unsurmountable obstacle but after a prolonged study of the subject I became satisfied that the undertaking was rational, and in my lectures before the Franklin Institute and National Electric Light Association early in 1893 I gave the outline of the system I had conceived. In the latter part of that year, at the Chicago World's Fair, I had the good fortune of meeting Prof. Helmholtz to whom I explained my plan, illustrating it with experiments. On that occasion I asked the cele-

brated physicist for an expression of opinion on the feasibility of the scheme. He stated unhesitatingly that it was practicable, provided I could perfect apparatus capable of putting it into effect but this, he anticipated, would be extremely difficult to accomplish.

I resumed the work very much encouraged and from that date to 1896 advanced slowly but steadily, making a number of improvements the chief of which was my system of *concatenated tuned circuits* and method of regulation, now universally adopted. In the summer of 1897 Lord Kelvin happened to pass thru New York and honored me by a visit to my laboratory where I entertained him with demonstrations in support of my wireless theory. He was fairly carried away with what he saw but, nevertheless, condemned my project in emphatic terms, qualifying it as something impossible, "an illusion and a snare." I had expected his approval and was pained and surprised. But the next day he returned and gave me a better opportunity for explanation of the advances I had made and of the true principles underlying the system I had evolved. Suddenly he remarked with evident astonishment: "Then you are not making use of Hertz waves?" "Certainly not," I replied, "these are *radiations*. No energy could be economically transmitted to a distance by any such agency. In my system the process is one of *true conduction* which, theoretically, can be effected at the greatest distance without appreciable loss." I can never forget the magic change that came over the illustrious philosopher the moment he freed himself from that erroneous impression. The skeptic who would not believe was suddenly transformed into the warmest of supporters. He parted from me not only thoroughly convinced of the scientific soundness of the idea but strongly expressing his confidence in its success. In my exposition to him I resorted to the following mechanical analogues of my own and the Hertz wave system.

Imagine the earth to be a bag of rubber filled with water, a small quantity of which is periodically forced in and out of the same by means of a reciprocating pump, as illustrated. If the strokes of the latter are effected in intervals of more than one hour and forty-eight minutes, sufficient for the transmission of the impulse thru the whole mass, the entire bag will expand and contract and corresponding movements will be imparted to pressure gauges or movable pistons with the same intensity, irrespective of distance. By working the pump faster, shorter waves will be produced which, on reaching the opposite end of the bag, may be reflected and give rise to stationary nodes and loops, but in any case, the fluid being incompressible, its inclosure perfectly elastic, and the frequency of oscillations not very high, the energy will be economically transmitted and very little power consumed so long as no work is done in the receivers. This is a crude but correct representation of my wireless system in which, however, I resort to various refinements. Thus, for instance, the pump is made part of a resonant system of great inertia, enormously magnifying the force of the impress impulses. The receiving devices are similarly conditioned and in this manner the amount of energy collected in them vastly increased.

The Hertz wave system is in many respects the very opposite of this. To explain it by analogy, the piston of the pump is assumed to vibrate to and fro at a terrific rate and the orifice thru which the fluid passes in and out of the cylinder is reduced to a small hole. There is scarcely any movement of the fluid and almost the whole work performed results in the production of radiant heat, of which an infinitesimal part is recovered in a remote locality. However incredible, it is true that

the minds of some of the ablest experts have been from the beginning, and still are, obsessed by this monstrous idea, and so it comes that the true wireless art, to which I laid the foundation in 1893, has been retarded in its development for twenty years. This is the reason why the "statics" have proved unconquerable, why the wireless shares are of little value and why the Government has been compelled to interfere.

We are living on a planet of well-nigh inconceivable dimensions, surrounded by a layer of insulating air above which is a rarefied and conducting atmosphere (Fig. 5). This is providential, for if all the air were conducting the transmission of electrical energy thru the natural media would be impossible. My early experiments have shown that currents of high frequency and great tension readily pass thru an atmosphere but moderately rarefied, so that the insulating stratum is reduced to a small thickness as will be evident by inspection of Fig. 6, in which a part of the earth and its gaseous envelope is shown to scale. If the radius of the sphere is $12\frac{1}{2}$ " then the non-conducting layer is only $1/64$ " thick and it will be obvious that the Hertzian rays cannot traverse so thin a crack between two conducting surfaces for any considerable distance, without being absorbed. The theory has been seriously advanced that these radiations pass around the globe by *successive reflections*, but to show the absurdity of this suggestion reference is made to Fig. 7 in which this process is diagrammatically indicated. Assuming that there is no refraction, the rays, as shown on the right, would travel along the sides of a polygon drawn around the solid, and inscribed into the conducting gaseous boundary in which case the length of the side would be about 400 miles. As one-half the circumference of the earth is ap-

proximately 12,000 miles long there will be, roughly, thirty deviations. The efficiency of such a reflector cannot be more than 25 per cent, so that if none of the energy of the transmitter were lost in other ways, the part recovered would be measured by the fraction $(\frac{1}{4})^{30}$. Let the transmitter radiate Hertz waves at the rate of 1,000 kilowatts. Then about *one hundred and fifteen billionth part of one watt* is all that would be collected in a perfect receiver. In truth, the reflections would be much more numerous as shown on the left of the figure, and owing to this and other reasons, on which it is unnecessary to dwell, the amount recovered would be a vanishing quantity.

Consider now the process taking place in the transmission by the instrumentalities and methods of my invention. For this purpose attention is called to Fig. 8, which gives an idea of the mode of propagation of the current waves and is largely self-explanatory. The drawing represents a solar eclipse with the shadow of the moon just touching the surface of the earth at a point where the transmitter is located. As the shadow moves downward it will spread over the earth's surface, first with infinite and then gradually diminishing velocity until at a distance of about 6,000 miles it will attain its true speed in space. From there on it will proceed with increasing velocity, reaching infinite value at the opposite point of the globe. It hardly need be stated that this is merely an illustration and not an accurate representation in the astronomical sense.

The exact law will be readily understood by reference to Fig. 9, in which a transmitting circuit is shown connected to earth and to an antenna. The transmitter being in action, two effects are produced: Hertz waves pass thru the air, and a current traverses the earth. The former propagate with the speed of light and their energy is *unrecoverable* in the circuit. The latter proceeds with the speed varying as the cosecant of the angle which a radius drawn from any point under consideration forms

with the axis of symmetry of the waves. At the origin the speed is infinite but gradually diminishes until a quadrant is traversed, when the velocity is that of light. From there on it again increases, becoming infinite at the antipole. Theoretically the energy of this current is *recoverable* in its entirety, in properly attuned receivers.

Some experts, whom I have credited with better knowledge, have for years contended that my proposals to transmit power without wires are sheer nonsense but I note that they are growing more cautious every day. The latest objection to my system is found in the cheapness of gasoline. These men labor under the impression that the energy flows in all directions and that, therefore, only a minute amount can be recovered in any individual receiver. But this is far from being so. The power is conveyed in only one direction, from the transmitter to the receiver, and none of it is lost elsewhere. It is perfectly practicable to recover at any point of the globe energy enough for driving an airplane, or a pleasure boat or for lighting a dwelling. I am especially sanguine in regard to the lighting of isolated places and believe that a more economical and convenient method can hardly be devised. The future will show whether my foresight is as accurate now as it has proved heretofore.

THE PULSING INNER GOD
Sarosh Dinshah Ghadiali

We came across a U.S. News article written back in 1981. It so fascinated us, we desire to share the Essence with you...No Answers, just some "Food for Thought."

Heart Muscle of Rats

A bio-chemist, Isaac Haray had examined heart muscle many times under a microscope. It was in the early 60's. He minced up the heart muscle of some young rats; added an enzyme to break down the Protein that bonds the cells together.

Then he placed the separated cells in a nutrient medium where they mingled with blood cells as well as cells of other tissues.

Rhythmical Pulse

After a few hours, the round Heart Cells settled to the bottom of the dish, flattened and sent out threads to attach themselves to the bottom of the glass.

After achieving the necessary tension, about one in every hundred cells began to beat. Haray labeled them "Leading Cells."

The Pulsation rate varied from 10 to 180 beats a minute. Some twitched irregularly; others actually pulsated like miniature Hearts.

The Cells began to multiply, soon crowding one against the other. As the Cells touched, the Leading Cells imparted their Rhythm to the non-beating Cells. As one throbbing unit met another, they synchronized beats, taking the most rapid rhythm. Steadily pulsing in unison, the Heart Cells blended into a solid sheet of Tissue.

Just what makes these pulsations? No answers are yet in scientists' hands, but rest assured it is the Mighty Creator's Design...

(Paraphrased from the article The Heart - The Living Pump (C) 1981 U.S. News Books.) Reprinted from NATURAL LIVING (formerly "Health For Better Living") Vol 4, Issue 12, edited by Sarosh Dinshah Ghadiali, 811 St. Louis Ave., Ferndale, Michigan 48220, (313) 398-0674. A Subscription to NATURAL LIVING is \$24 per year and is issued twice monthly. Mention Borderland and deduct \$4 from price.

Subscribers to Natural Living can purchase books on Light and Color such as Dinshah P. Ghadiali's 3-Volume Color Encyclopedia (\$60pp) and the new three volume set of Sarosh's Compendium of Light and Color (\$40pp) or both sets for \$90pp. Sarosh is interested in doing workshops around the country. Those interested should contact Sarosh for more details.

OLD ELECTROTHERAPEUTIC DEVICES

By Jorje Resines

In the "good old days" (before WWII, after which the AMA and its branches at the different "banana republicettes" dictated what must be done and what is not to be done in the realm of Medicine and Healing) the enterprising scientists of the world dared to intrude into this field and worked hand-in-hand with the MDs to implement better healing devices, even if these left a lot to wish in terms of efficiency. From the article "Electroterapia" of the 1929 issue of the "Enciclopedia Espasa-Calpe" (The Spain-originated equivalent of the "Encyclopedia Britannica") I have extracted the basics of those machines. More complicated devices are only a combination of the features herein presented.

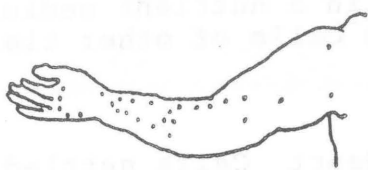


Figure I

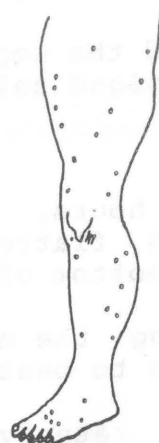


Figure II

The old electrotherapists began by first determining those points of the body that were sensible to electrical discharges. They did so without frying the prospective patient through the usage of Wimshurst-type electrostatic machines. The results (shown partially in Figures I and II) were "points of electrical resonance" that produced the contraction of a certain muscle/organ of the body that had no visible physical connection with them. Not unsurprisingly some of these points fall into Acupuncture meridians and some of them are directly acupuncture points, but the electrotherapists--lacking the proper data from China--failed to identify them.

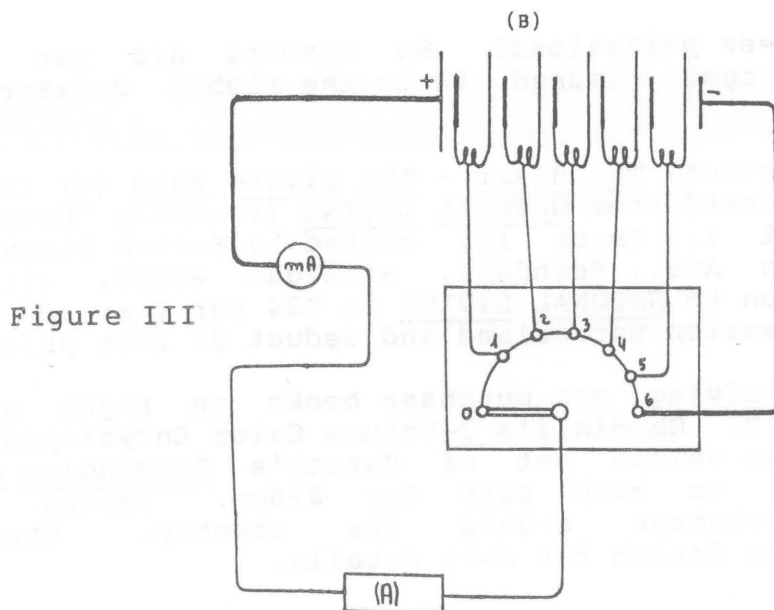
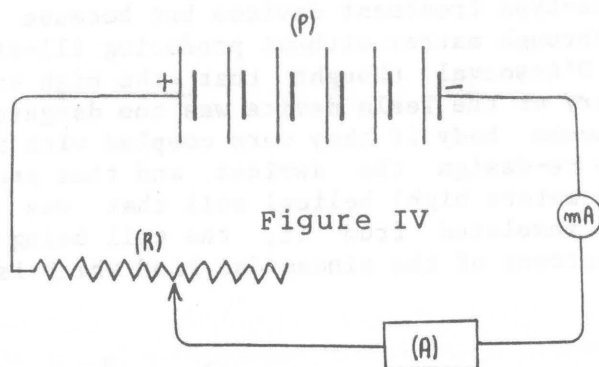
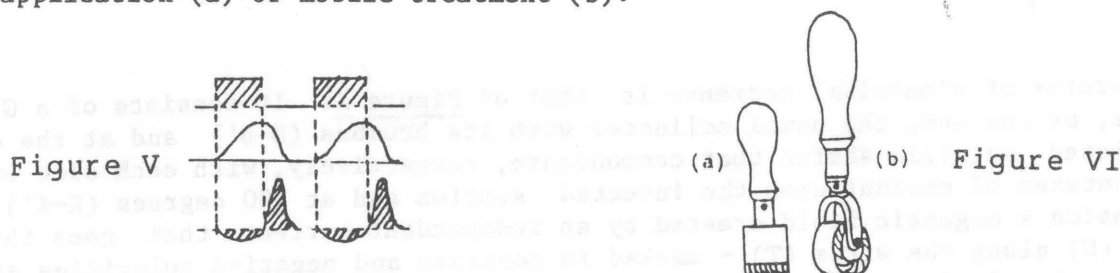


Figure III

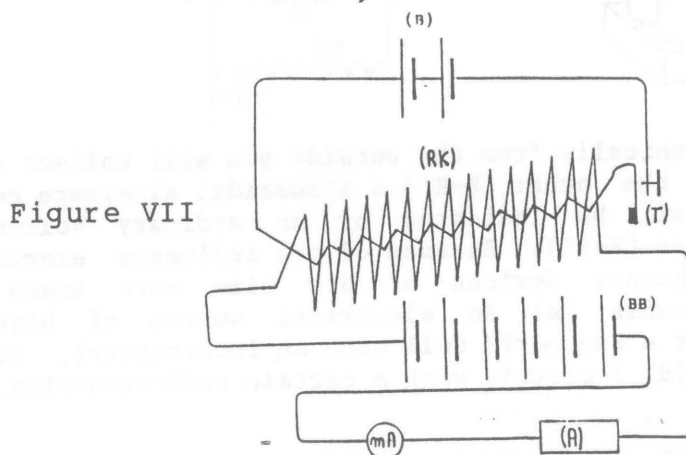
The treatment of maladies began by the electrification of the affected zone in an indirect way and began with "galvanic devices", such as the one of Figure III, that delivered a galvanic current into the affected spot. It consisted of a grouping of (usually) Leclanche batteries (B) connected to a milliammeter (mA) and a point-by-point knob graduated from 0 to 5 (in this specific case) whose output was given to the patient (A). Another embodiment of the same principle is shown in Figure IV where a resistor (R) was added to regulate the power being delivered.



As the electrotherapists were very careful, the current was not applied directly to the skin but through insulated electrodes such as the ones of Figure VI which have a wood handle connected with a metal shaft to a cylinder of compacted carbon that was coated (at the application end) with a layer of leather. The electrodes could be for fixed application (a) or mobile treatment (b).



If galvanic current was not enough, then Faradic current was tried. Faradic currents are due to induction phenomena and are different from other currents both in shape and physiological effects. Though they are actually alternate currents they do show a difference between the positive and the negative wave, which are also separated by a certain time interval. The electromotive force of the rupture current is much greater than that of the closing current, but the amounts of electricity born within the induced circuit are equal and of opposite signs. In its physiological sensitivity and motor effects Faradic current could be almost considered as an interrupted current travelling towards a same direction, and it is illustrated in the graph of Figure V.



The best way to generate a Faradic current was to employ a Leclanche battery and a Rumkhorff coil connected to the electrodes of Figure VI, but the electrotherapists saw it better to combine the two kinds of treatment into the galvano-faradic apparatus of Figure VII where (B) is the battery that feeds the Rumkhorff Coil (RK), (T) a make-and-break device, (BB) the Leclanche battery-grouping for galvanic treatment, (mA) a milliammeter and (A) the patient to be treated.

Sometimes the MDs used Tesla-type treatment devices but because of the nature of the Tesla waves (that cross through matter without producing ill-effects) the (in his time) world-renowned Dr. Arsene D'Arsonval thought that the high voltage necessary to generate the field in the primary of the Tesla device was too dangerous for it could affect through resonance the human body if they were coupled with the energies of the secondary, hence he proceeded to re-design the devices and thus produced a large (1.5 meter in diameter and about 2.5 meters high) helical coil that was wrapped around a metallic cage but electrically insulated from it, the coil being fed (with suitable spark-gaps or spark-quenchers) current of the sinusoidal kind which is graphed in Figure VIII.

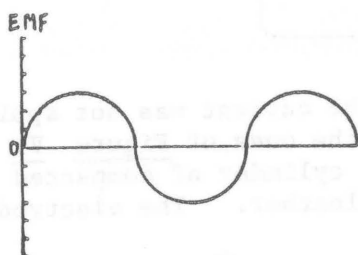


Figure VIII

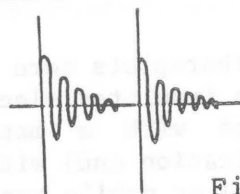


Figure IX

The generator of sinusoidal currents is that of Figure X. It consists of a Gramme ring that has, at one end, the usual collector with its brushes (B-B') and at the other end two insulated metallic shafts that communicate, respectively, with each side of the ring by two intakes of current upon the inducted section and at 180 degrees (K-K'), the ring turns inside a magnetic field created by an independent current that goes through the inductor (M) along the wires (T) - marked in positive and negative polarities at the illustration - that lead into the coils (C).

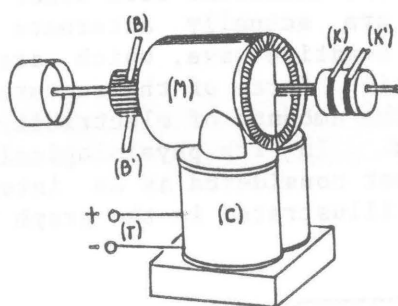


Figure X

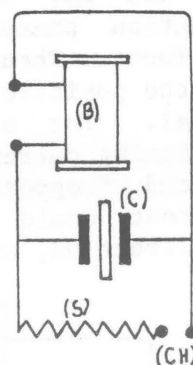


Figure XI

If the ring is activated mechanically from the outside you will collect on one side (B-B') a direct current and at the other (K-K') a sinusoidal alternate current; the usual maximal electromotive force will be indicated by an ordinary voltmeter of DC connected to the respective brushes (B-B'). Because of the influence exerted by Dr. D'Arsonval most of the high-frequency devices of his time were based upon the combination of the following components: (a) An electrical source of high potential (either a Wimshurst-type machine or a Rumkhorff Coil with an interrupter), (b) Two or more condensers, (c) A spark-gap, (d) A circuit with a certain self-induction, and (e) A

circuit induced by the former; though this is taken directly from the ideas of Dr. Nikola Tesla, they nevertheless produce damped waves such as the ones of Figure IX, and to do so use the circuits illustrated in Figures XI and XII, where (B) is a Rumkhorff Coil, (C-C') condensers, (S) a solenoid, (CH) a spark-gap, (mA) a milliammeter and (A) the patient to be treated. The circuit can be altered to that of Figure XIII, including a spiraling antenna that goes from (A) to (B) whose length is tuned by rotating a handle (H) that has a cursor in it capable of sliding upon the antenna, this generates a self-induction into the devices which is maximal when the cursor is at (A) and the minimum is at (B). All other elements are similar to the ones already considered save for the glass handles (M-M') which are connected through the terminals (T-T') to the healing device.

Figure XII

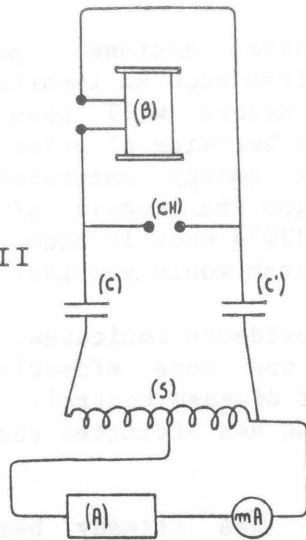
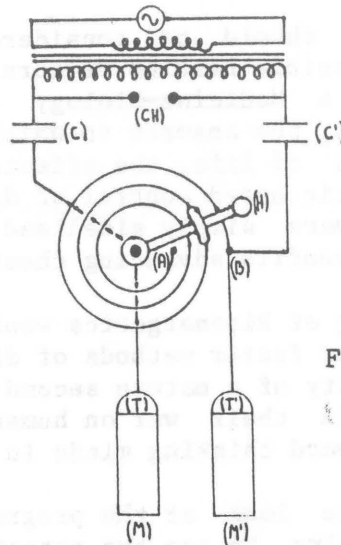


Figure XIII



This apparatus allows work with very short wavelengths, which eliminates any possibility of Faradic currents being within the circuit during the applications. The power utilized to treat an organism was of about 300 watts with an overall efficiency of 45%. The apparatus had a small volume and the only thing to do during applications was to turn the handle (H) to vary the wavelength employed, and the insulation between primary and secondary prevented any accidental connection between the ground and the patient who is also insulated from the high-voltage source by the double series of condensers and even if a short-circuit existed the patient could be maintained isolated from the power source by only remaining at the extremes of an impedance/resistance circuit that are nil for industrial frequencies (50 or 60 cycles per second).

For the sake of brevity and clarity I have not included in this article more ample references to the schematics of the devices used at that time. To those interested in pursuing the matter of studying the old healing machines I suggest the reading of (if you can find them) old encyclopedias and specially the articles on "Electrotherapy", "Electromedicine", "Electric Medicine", "Electrical Healing Devices" and/or "Electricity". Of course other articles can contain interesting material and it is only a matter of reading as much as possible of them.

As the situation of libraries in general is VERY BAD in Argentina, I am not sure if it there exists some sort of a "Electrotherapy History Book" that details the different electrical healing devices that have existed in the past and their evolution through the further radionic machines and present day apparatuses of this kind, therefore I will refrain from suggesting a given bibliography (unlike what I would like to do) for fear of leading the amiable readership of this Journal into false trails.

FUND ENERGY MEDICINE RESEARCH NOW
By Jeff Smith

There is a new medicine rising in Europe--and to a certain extent here in the USA--which recognized energy as the basis for life. The chemistry of a biologic system being the electrolyte in which the energetics flow.

In Europe and the U.S. this new medicine--and the biology which it represents--has become known by many titles. Bioenergetics is widely used in many quarters, but it has become more widely known as Energy Medicine.

Energy Medicine should be considered a central national priority. The benefits--and the possible results of turning away from such an important science as this makes it so. A Medicine-Biology of this nature will soon begin asking fundamental questions, the answers to which are fast becoming of prime importance in our world: The basis of life, the effects of our energy saturated homes, the prospects for energetic based control of disorders and the dangers of misuse. Many of these questions were simply sidelined in the 1930's when it became apparent the immediate clinical benefits advancing chemical research would provide.

An understanding of Bioenergetics would, much evidence indicates, quickly cause the rise of new, far faster methods of diagnosis and more effective treatment, opening the possibility of a mature second avenue of disease control. The opening of a second front in their war on human suffering has attracted the attention of some of the most forward thinking minds in medicine.

One only has to look at the progress which has already been made with starvation level funding, to see the potential which a fuller understanding of the energetics of life would have. Today, thousands of Americans with chronic pain problems are functioning drug free due to a simple electric pulse from a TENS machine. New imaging systems routinely detect and correctly diagnose life-threatening conditions months, even years, before they were detectable with the systems of even ten years ago. Stimulation of bone and even skin growth at greatly accelerated rates has become a reality.

Energy Medicine should be a National Priority with the levels of funding which reflect national commitment. A measure of the importance of Energy Medicine and what it would mean to Americans can be seen in two examples:

In New York State, one of America's most distinguished medical researchers first succeeded in causing accelerated skin growth among patients, then wondered why some species can, as in the salamander, regrow limbs. After a series of experimentations he succeeds in causing actual limb regeneration...his funding is promptly cut.

Two teams of researchers, one in California and one on Long Island, conduct research into what may be the final secret of life; the Matrix of energies, or the Lattice of energetics around which matter, in the form of DNA, forms. Both research teams soon find they are dealing with a matrix of energies which cannot be modeled in standard 3-space terms and they turn to five or six part space modeling only to find themselves severely constricted by standard systems of math they have to use.

On a simpler level, what if we can find a mix of frequencies to control an infectious agent or stimulate healing? What if we could isolate the energetic pattern of a disease and simply cancel it?

There is another reason for urgency in this matter.

From a series of intelligence sources it has become apparent that the Soviets have had what amounts to a Manhattan project in Bioenergetics over the last thirty years.

If it is possible to find or develop a medicine which grows out of a more fundamental biology, then it is in the highest interest of America that we forcefully pursue it.

The national interest simply dictates nothing less.

HYSTERESIS OF THE AETHER
Abstract by Eric P. Dollard

In the theoretical investigation of electric induction the propagating velocity of the transverse electro-magnetic (T.E.M.) component of induction is the only propagation constant considered. The propagation throughout space of the independent magnetic field of induction and the independent dielectric field of induction is not considered. In reality, however, these fields of induction start at the conductor and propagate from there throughout space at a definite velocity; that is, at any point in space the field of induction of magnetism or dielectricity at any moment in time corresponds not to the condition of induction at the conductor at that moment but that at a moment earlier by the time of propagation from the conductor to the point in space under consideration. Hence the given field of induction lags in time the more, the greater the distance from the conductor.

This lag in phase with respect to distance results in the cycle of energy return of the field of induction falling behind its point of phase opposition with the cycle of energy storage. This lag in phase gives rise to an energy component, that is an effective magnetic resistance or an effective dielectric conductance to the reactance or susceptance of the magnetic & dielectric fields respectively.

The phase angle of this lag in the cycle of energy return has been called the angle of hysteresis of the inductive medium and has become well known for ferrous materials. However, the application of this concept to the inductive medium known as the aether has received no attention except by Steinmetz. The purpose of this paper is the adaptation of Steinmetz' inductive propagation to the study of the hysteresis of the aether and a determination of the propagation velocity therefrom.

(Abstract of paper to be read before the 1988 International Tesla Symposium to be held on July 29-31, 1988 in Colorado Springs. For more information contact: International Tesla Society, 330-A West Uintah, Suite 215, Colorado Springs, CO 80905. Phone: (303) 570-0876.)

AQUALITHIA
By Haroldine

AQUALITHIA is a natural mineral water. It was named from the Greek word "lithos" (Stone), meaning water of stones or minerals. It is a diamagnetic, negatively charged high grade tellurian water. When it was biomagnetically analyzed the only whole element that was found present was neon. The lithium content was less than minimal, the conclusion--because of its unusual properties and vast applications--was the total combination of the contained minerals was what made it different from other waters.

Exactly where this water originated, no one can be totally sure because of the massive canyons and caverns lining the interior of our planet which sometimes act as giant reservoirs of primal water before the water eventually ebbs to the surface. One of the greatest problems in most types of mining is the vast amounts of water from the interior of the earth flooding to the surface as the miners dig deeper & deeper. This natural mineral water flowed heavily upward when the miners seeking the precious gemstone tourmaline, dug downward to levels of 800-1000 ft inside a pegmatite dike of a lithium mine in 1980. Subsequent water specimens test gathered at the same source at the lithium mine over a period of three years did not analyze out with the same percentage of specific minerals as the original called AQUALITHIA. Neither did it contain the same property of a single drop of AQUALITHIA, which when added to one gallon of distilled water, would reconstitute the new gallon to contain equal energy potency as the original.

A teacher at the Dowsing School at the Dansville VT Dowsing hdqts. while checking out a specimen of AQUALITHIA in Sept '86 proclaimed it was the 4th most solvent (4th wettest) water on this planet at the present time. Recently more & more articles are appearing that mention colloidal chemistry. That is the suspension of electrolytes/trace minerals or elements/minerals/crystals that are energy charged or active in a solution that maintains the life force dynamic flow and circulation within a liquid. AQUALITHIA qualifies as a very special high energy colloidal or catalyst altered type water with the additional blessing that its made by Mother Nature and its natural!!!

The following list contains some of the catalyst altered waters being researched. All seem to contain ability to bring more beneficial type oxygen to the body systems:

<u>Process</u>	<u>H2O</u>	<u>Angstrom measurement</u>
Nature	AQUALITHIA	205,000
Man-made	Bio-Line	158,000
Man-made	Crystal Energy Concentrate	178,000
Man-made	Fantazia	300,000
Nature	Holy H2O--Lourdes France	156,000
Clay	Scott mineral H2O or Iron H2O	135,000
Man-made	Willard water	165,000

Over a time period, the top 1/10 of most liquids (most foods contain high liquid content) become South-polar energy charged. The S-polar energy encourages the growth of bacteria, mold and slime which gradually breaks down the nutrients to a condition often called stagnation. The surface tension becomes so charged, eventually the product or food is no longer fit for use or for human consumption.

One of the applications of AQUALITHIA (reconstituted spray mist) is that it is able to prolong shelf-life of many foods in the refrigerator by delaying breakdown and decay. A gentleman farmer and radionic researcher has reported that AQUALITHIA neutralizes the poisonous dioxins in the soil. Another researcher working with commercial farms found AQUALITHIA to be specific for the restoration of the natural energies of the soil while additionally acting as a natural chelator. It is also reported to have the ability to remove the residues of pesticides or insecticides in the commercial grain and hay feed sold to the ranchers and dairy farmers for their livestock.

A mist of AQUALITHIA sprayed over the top of the head acts like a fine tooth comb in removing pos-ions collection from the human aura - one then feels refreshed as if they had just stepped out of the morning shower. For those sometimes having problems going to sleep at night, the mist sprayed on the bottom of bare clean feet greatly eases the ascent into sleep. AQUALITHIA acts as a food & vitalizer for house plants by spraying once a week, in addition to the regular watering and plant care. Immediately spray on bumps or bruises after injury, AQUALITHIA seems to remove pain memory programming to cells along with removing pain almost instantly, seldom will a black & blue mark or bruise be noticeable the next day. In case of burn or severe sunburn, the spray mist on clean body skin instantly removes pain and at the same time in case of sunburn seems to aid tanning. (If utilized both before and after sunning AQUALITHIA appears to enhance skin & tanning even more.) Some use AQUALITHIA for setting their hair curls and as a skin freshener before applying makeup.

I do not recommend AQUALITHIA for internal use, though many researchers do use it that way & report beneficial results. A radionic Doctor in Canada uses 1 drop in an 8 oz. glass of regular water -- waits five minutes and drinks. He feels it causes his body to act like a sponge to absorb more balancing/healing rays of the sun.

Original AQUALITHIA is available for research from Borderland Sciences Research Foundation. A half ounce of AQUALITHIA can be reconstituted into 240 gallons at a cost of less than \$0.10 per gallon, making it the least expensive of available catalyst waters, instructions are included. 1/2 oz of AQUALITHIA mineral water is \$22 postpaid. Californians add 6% state sales tax. Offer good on all orders postmarked before June 30, 1987. No discounts available on AQUALITHIA. AQUALITHIA is a trademark of Lithium Labs Ltd.

THE NEGATIVE INFLUENCE OF WATER VEINS, Part II

Zbigniew Wisniewski

Pogodna, 11a, 71-376 Szczecin, POLAND

To return to the watery veins running under our flats...

I would like to present three typical flats with an outline of watery veins:

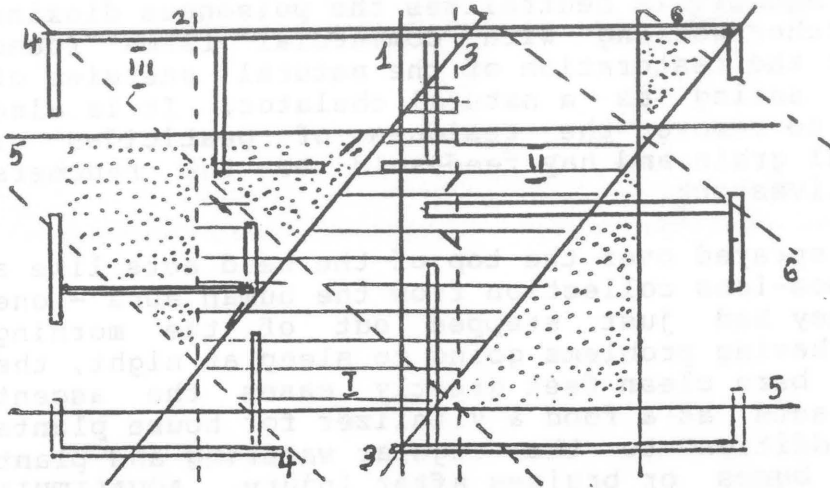


Table of harmfulness		
ordin. no	radiance 0-10	radiation 0-10
1.	2,0	2,0
2.	-	2,5
3.	2,0	2,5
4.	-	2,0
5.	3,0	3,0
6.	-	2,5

Illus.1.

In illus. 1 we can see six watery veins, three of which radiate radioactively. The radiesthetists have accepted a 10 degree scale, and each underflow has its definite value in the scale. In this illustration the crossing of two veins has been marked with points, the crossing of three or more veins with full lines and, additionally, three positions or areas have been marked: I - II - III.

Position I represents the crossing of four veins; no 2, no 3, no 4 and no 5. The radiation accumulates so the total value is:
 $- 2+3+4+5 = 2,5+2,5+2,0+3,0 = 10,0$ and 5,0

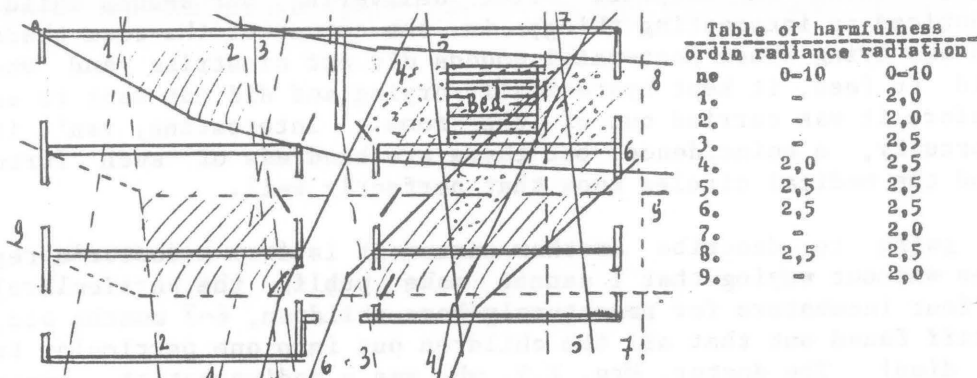
In this place the positive ion density has reached the maximum point /10,0/ and the intensity of natural radiance - the middle point of the scale /5,0/

Position II represents the crossing of three veins; no 1, no 3 and no 5 that is -
 $1+3+5 = 2,0+2,5+3,0 = 7,5 + 7,0$

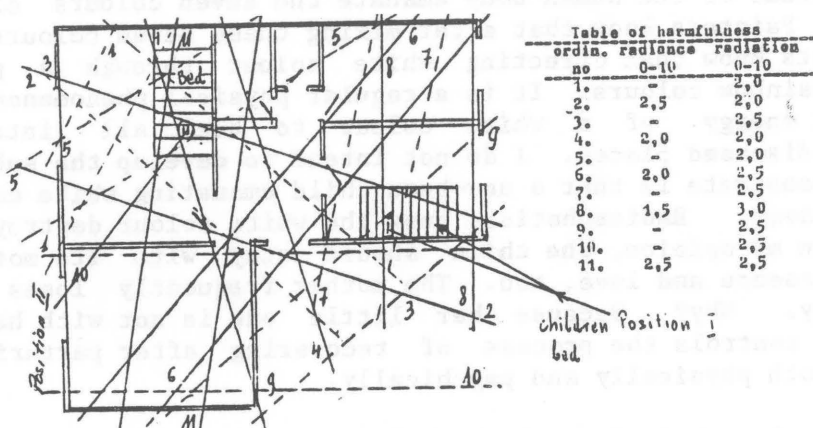
Position III = 0

The watery veins radiating radioactively have been marked with full lines, the others with broken lines. Now, the importance of where we put our beds seems evident; yet in most cases they are put in position by chance. However, knowing the radiation values of each place we can change it.

On the other hand, because of a specific distribution of window openings and doorways, we may be forced to set up our beds in a given place, and often all the tenants of an apartment house from the ground to the last floor put their beds in the very same position. That is why it is necessary to look at watery veins - before building the house.



In the background there have been marked 9 geopathic threads. Each thread is marked with a successive number from both sides, and for a clearer picture each one may be marked with a different colour. The veins 4,5,6,8 with red, because of their radioactivity, that is to say double harmfulness. In my work I have accepted the rule to mark such radioactive veins. The owner of this flat slept in the position marked in the plan, and she suffered from a swelling of the legs.



Position I: $2+7+8+9 = 2,0 + 2,5 + 3,0 + 2,5 = 10,0 \text{ Ra!}$

Position II: $2+3+4+5+11 = 2,0 + 2,5 + 2,0 + 2,0 + 2,5 = 11,0 \text{ Ra!}$

No comment!

Then, there have been marked eleven watery veins. It is the plan of one of the worst flats I have ever met. The owner when she slept, kept her head in the place marked with a circle. She had permanent headaches and changing blood-pressure, the reason was unknown. After my securing the flat everything was back to normal - now the lady recommends my services to her friends. As a rule it is the ladies who telephone me when my services are needed, and there are two reasons, I suppose. Firstly, women are more sensitive than men; secondly, because of their housework activities women are more interested in the prevention of diseases.

My wife who used to be a nurse, told me of specific hospital beds, the so-called "unlucky ones", where gravely ill patients always died, in which injuries did not want to skin over. Why? What factor interfered in this process?

When my wife stayed in hospital after delivering our second child - it was a daughter - she noticed an interesting thing; in the corner of the room there was a bed in which a woman was lying whose post-natal wounds did not cicatrize and when she was brought the child to feed, it kept hysterically crying and did not want to eat, and did not calm down before it was carried out of the room. Interesting, isn't it? You may say it is a fortuity, a coincidence, but there are hundreds of such fortuities and coincidences, and the medical circles know that perfectly well.

Now, I am going to describe another case - it is from a doctor's report. In a hospital (it goes without saying that I cannot make public the particulars), in a big room there were four incubators for prematurely-born children, 6-7 months old, and after some time the staff found out that all the children put into one particular incubator of the four always died! The doctor, Mrs. Z.S. who was a radiesthetist, tested with a pendulum the distribution of watery veins under the incubator in question. The result? A crossing of three veins. After changing the position of the incubator, the situation was back to normal. Is this a coincidence?

Now, I shall describe a very interesting phenomenon discovered by radiesthetists; all new-born children immediately after birth emanate white colour of a radius of 2 to 40 cm. This emanation lasts for 14 days and then disappears. For some people it is no secret that seven chacrams of the human body emanate the seven colours of the rainbow from red to violet. Painters know that after mixing these seven colours the white one is received. Physicists know that directing white colour through a prism they can obtain all the seven rainbow colours. It is a regular physical phenomenon. Healers and chiropractors transmit energy of a white colour to heal all internal organs, particularly the more diseased places. I do not intend to develop the subject, the only thing I want is to demonstrate is that a new-born child emanating white colour helps its mother to quickly recover. Radiesthetists know the white colour destroys bacteria and viruses. Therefore, in my opinion, the child should stay with its mother round-the-clock, it needs her presence and love, too. The mother frequently loses milk within 14 days from the delivery. Why? Because her little one is not with her, because its presence regulates and controls the process of recovering after parturition, which is surely a great shock both physically and psychically.

One more example. I took it from the book "Models of Pyramids and Their Secrets" by K. Zaleski. In one of the Warsaw hospitals Prof. Dr. N. was expected to carry out a serious operation on a young soldier. While the anaesthetist was preparing the devices, the professor was skimming through the patient's records and all of a sudden he saw the electro-cardiogram. According to it the patient should have been dead already, so the operation seemed ridiculous under the circumstances - the patient was sure to die during the operation. The professor was just going to call off the operation but suddenly he saw the patient's face; it was rosy and chubby-cheeked and contrasted sharply with the electrocardiogram. The professor got another absolutely efficient electrocardiograph delivered and the patient was examined again. It proved him to be completely healthy. A thorough overhaul of the first electrocardiograph did not detect any breakdowns which means the device falsified the result by itself. A coincidence? Perhaps, but why are there similar cases recorded in other countries? And another question arises here: is there any remedy for this weird phenomenon? Is it possible to protect our places and bodies from the harmful radiation of watery veins? Of course it is, but how?

To understand the essence of the matter we have to go further back into the past, a thousand years or even more. I would like to underline that as a believing Christian I will be using from now on the term "God" and not "Nature" because I am convinced God created Nature and Man. I hope I am not hurting anybody's feelings, and the unbelievers

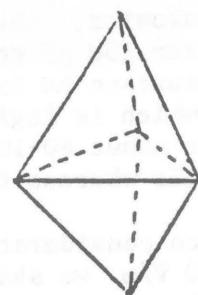
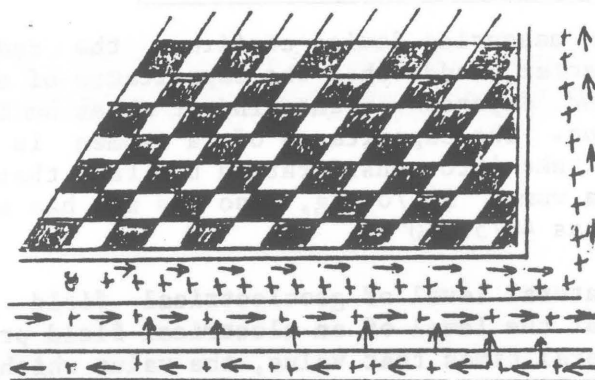
can replace the term "God" by "Nature" and everything will be O.K. God creating man in the form he has survived until now, knew perfectly well how dangerous watery veins radiation produced by positive ions is to people. So he created natural insulators which because of their characteristics (material, shape, structure) do not allow the positive ions to go through, or at least considerably limit their penetrability. Such insulators are: all kinds of marble, some cobble-stones, clay to some degree, timber, oat straw, sheepskin, camelskin, bearskin, sea-grass and the like natural materials.

Now, I will briefly discuss marble from the point of view of its structure. Marble is made of limestone recrystallized at high temperature and pressure. One of the more widespread types of marble is calcite (calcium carbonate CaCO_3) crystallized in a trigonal system. The calcite crystal resembles two pyramids connected by their triangle bases. It is just the structure that makes positive ions refract and reflect, that enables their total insulation, and this is not the only advantage. Marble is not only an insulator but a reradiator within several score cm as well. So, when a thousand years ago a rich man had a castle made, he had it paved with marble - in spite of the high price which is high now, too. Marble was and still is advisable because:

1. it is practical - a rag is enough to clean it.
2. it is aesthetic - for example, a wonderful mosaic is created of white and black marble.
3. it is durable - until now the works of ancient masters have survived.
4. it cools the air in the room while the outside temperature is several degrees higher (e.g., in Italy and Spain)
5. and its most important quality - it protects the place from the harmful radiation of watery veins.

In the opinion of many scientists and archaeologists radiesthesia is as old as mankind, and ancient records and radiesthetic instruments preserved until our times prove that. I mean here the pendulum and the dowsing rod. Worth mentioning also is the so-called "Egyptian pendulum" discovered in the Kings Valley, the Indian Shell of North America, and the Chinese device Pa-Koua. The Chinese have called watery veins "dragon's teeth", and have always if possible, put their houses in places not irradiated. So, people have always known about the negative influence of watery veins on the human body, although they have called it by different names.

To return to marble, members of the aristocracy had their halls and ground-floors paved with marble in full consciousness, thus insulating all the other floors.



CALCITE CRYSTAL

The rich lived in "clean" houses and what about the poor? When a peasant built a hut, he paved it with cobble-stones and cast them with clay mixed with lime; he slept on a timber bed, on which there was an oat straw mattress (which he changed every year), he

threw a sheepskin over himself and wore it too, therefore protecting his body to the maximum degree. Please note the convergence between the materials I mentioned above and the ones from the books on physics dealing with electrical friction, I mean the materials which conduct electricity and the ones that do not. Please compare!

As a result people of the 20th century who neglect natural protection endanger their bodies in a permanent positive ions attack. They produce artificial furs, artificial leather, artificial marble, artificial underwear, artificial food, artificial fertilizers and so on. Please remember - you cannot do anything about physical or chemical phenomena. If we administer a minimum dose of potassium cyanide to 10,000 people, they all are sure to die before long. If 10,000 people touch a bare conductor in which a 220V current flows, they all will feel a "kick", and if any one of them were lying at the same time in a bathtub full of water, he would die. I do repeat: physical and chemical phenomena are real facts independent of our will, and a positive ions attack is also a physical phenomenon. Thanks to technological development it is possible at present to control all these phenomena by means of special devices, and now I would like to present to you such a scientifically tested radiesthetic phenomenon.

A worker of the Maritime Institute of Gdynia, Iceland, examined the geo-electrical field intensity at the Gdansk seaside in July, 1985, on a sunny day in the afternoon with a relative air humidity of 50% and 26 degrees C. The measurements were carried out by means of an electrical field intensity isotopic meter RMEL-F1 type made by Measuring Devices Factory "Polon" in Cracow. The meter has 5 measuring ranges from 30 V/cm to 30 kV/cm, with a field polarity indicator. The accuracy of measurement is $\pm 10\%$. The results have been presented below:

Measuring point	Measuring point height (m)	Geoelectrical field intensity (V/m)	Field sign (+/-)
	2	3	4
concrete pavement	0	20-90	+
asphalt concrete	0	50-150	+
marble floor	10	30-90	+
Chemically lacquered parquet	20	180-240	+
not varnished parquet	20	0	+
floorcloth of plastics	20	240-300	+
artificial floorcloth on			
chemically lacquered parquet	25	300-400	+
carpet of plastics	35-55	700-1000	+
woolen carpet	10	30	-
natural fur carpet	15	60	-

The results obtained by means of the measuring device confirmed the radiesthetic experiences. Mr Wankowicz, the experimenter, adds that the capacitance of a standing adult man amounts from 150 pF to 150 pF and depends on the kind of shoes he is wearing and on the type of surface he is walking on. The capacitance of a woman is about 40% less than a man, which is logical if we take into consideration the fact that the mass of an average man is about 80-100 kg and a woman 50-70 kg, also the man has an average of 70×10^{12} body cells whereas the woman has $40/50 \times 10^{12}$.

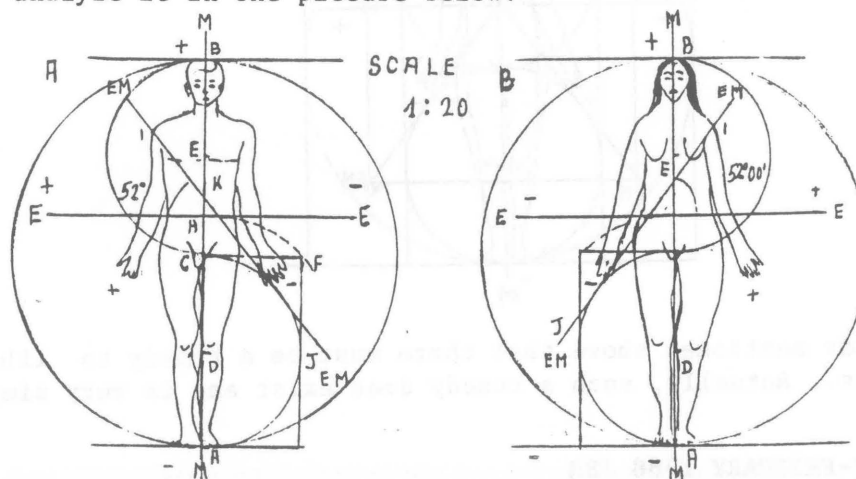
If we take into consideration the natural level of geoelectrical field intensity which amounts to 130 V/m, we shall see that the level of an electrical field produced by plastics from our houses can exceed several times that value, the value which has been accepted as a natural background to which the human body is accustomed. By the way, let me present a table taken from the book "Pyramid Power" by Dr. G. Pat Flanagan. The author quotes the results of the researches carried out by NASA concerning the influence of positive and negative ions on the human body.

Examined situation	negative ions	positive ions
EXECUTION	increased	decreased
PRODUCTIVITY	increased	
DISPOSITION	cheerful	depression
RESPONSE TIME	decreased	increased
BALANCE	increased	
METABOLISM OF VITAMINS	increased	
PAIN	mitigated	
ALLERGIC COMPLAINTS	mitigated	
CONVALESCENT & RECOVERY	increased	

The table is not complete, nevertheless it confirms my arguments. Here is another case: two or three weeks before the tragic crash of "Challenger" I heard on the Polish radio that one of the launch terms had been cancelled because of a breakdown produced by static electricity. I do not know the particulars and neither have I access to the maps but I am positive "Challenger" was standing at a watery veins crossing. I would be very obliged if anybody sent me the groundplan with a description.

Now, there is another question: what is to be done about a surplus of positive ions in a human organism, for example, when we have 73×10^{12} positive ions and only 70×10^{12} negative ones? There must be a remedy... The world has been built of two opposite forces, so if there is a force there is a counter-force as well, but our civilization has forgotten most of these "counter-forces". Here for example, are some pairs of opposites: plus-minus, light-darkness, right-wrong, base-acid, up-down, centripetal-centrifugal, white-black, attraction-repulsion, and so on. This is not a primitive speculative approach to the reality as is sometimes argued, but an out-of-the-question fact. If there were no attraction force, we all would be launched into outer space. Opposite forces are the basis of our existence. Physicians know perfectly well that keeping an acid-base balance is vital for our body, and everyone knows he feels best at a moderate temperature and pressure, doesn't he?

From 70 to 90% of the human body is water. This amount decreases with age, and as a consequence, cell crystallization takes place. Therefore man can be assumed to be a walking battery containing a strictly defined electrical potential. Besides the human body is polarized. The positive and negative poles are two Creative Forces of Cosmic Consciousness that make everything exist in a defined form. The potential of both poles in the body must be equal, for only then is a perfect balance possible. Radiesthetic research workers discovered that the magnetic axis N-S divides the human body into two parts - right and left - being at the same time the symmetrical axis of the body; whereas the electrical axis divides it into unequal parts - upper and lower. Why unequal? Let me analyze it in the picture below:



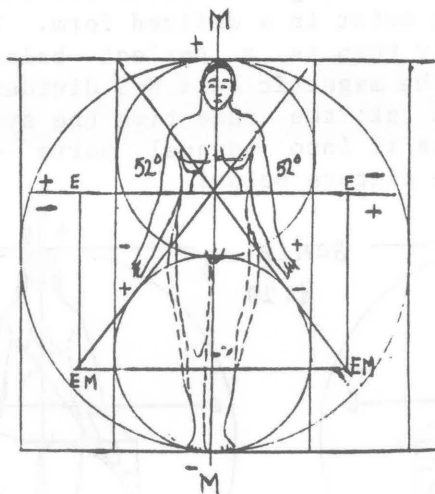
In illus. A we can see the figure of a man 1.6 m tall in the scale of 1:20. The 8 cm long segment AB divides the body into two parts, let's call it a magnetic axis because of its similarity to the terrestrial poles. The segment AB is divided into two equal parts by the point C. The segments AC and CB are divided further into two parts by the points D and E respectively. The point D is the centre of a semicircle of radius $AD=CD$. Please note one thing: the point C is situated at the level of the sexual organs. After drawing the semi-circle, a tangent parallel to the segment AC is traced. The tangent is connected with the point C by a segment parallel to AG. Now a semicircle of radius DF is traced and it intersects the axis M at the point H, dividing the segment AB by the so-called "golden cut". Tracing a parallel to the CF through the point H we obtain an electrical axis E which divides the body into two parts: upper (+) and lower (-).

Now, we have to find a resultant of the magnetic and electrical forces - the electromagnetic force. Looking for it we trace a tangent to the circle with the centre at the point I. That point is the most advanced one of the male body, thus we have obtained the axis EM which is a production of the segment IJ. The intersection point of the axes M and EM is at the point K, which in turn dominates the "plexus solaris".

Interesting, isn't it? And, what's more, the angle included between the axes E and EM amounts to 52 degrees, the inclination angle of Cheops Pyramid. A famous sketch drawn by Leonardo da Vinci is worth mentioning here too, representing the "golden division" of the human body.

The picture B is the continuation of the picture A. We trace a semicircle of radius $EB=EC$ and a circle with the centre at the point C, thus obtaining a male silhouette inscribed in a circle. Additionally the figure we have drawn is the symbol of yin-yang, an ancient Chinese secret sign describing everything. By means of this symbol we are able to represent all pairs of opposite forces, the whole Universe, DNA, etc. Briefly speaking, man is a reflection of both the pyramids and the symbol of yin-yang.

In the picture below, a female silhouette is now represented. It has the reverse polarity of the male, in this image made by superimposing the male figure on the female. The adherents of reincarnation can see here clearly why human beings must be incarnated alternately man and woman - the image has to be complete.



I have already mentioned above that there must be a remedy to liberate our bodies from positive ions. Actually, such a remedy does exist and is very simple.

Assuming that the human body is a walking battery, an organic mass of a big and variable potential, reactions must take place within it which are similar to the reactions occurring in a battery. According to the picture, the left male hand is the pole (-) and the right one (+). Do you remember what you were taught at school, what phenomenon takes place when we connect the positive pole with the negative one in a battery? A short-circuit! In just this way we can discharge our bodies of positive ions: we make our organisms electrostatically balanced. A wonder, isn't it?

That is why God ordered people to pray three times a day - in the morning, at noon and before sleep. In the morning, because the human being who slept in an unprotected place was subject to the bombardment of positive ions and, as a result, a surplus arose in the organism. It was easy to get rid of this surplus by keeping both hands joined for a while, that is to say praying.

Then the human being, say a farmer, went to work in the fields where as he moved about, he was again bombarded by positive ions - even though the human body standing upright has a considerably reduced surface for attack. So at noon he prayed again, ridding himself of the excess of positive ions. The same was repeated in the evening. Was it possible 2000 years ago for God to explain to people the phenomenon of positive and negative ions? He made them pray three times a day, that is to say, to keep both hands joined. Does Nature make people pray? By praying we first of all purify our bodies of the harmful excess of positive ions, and additionally we can ask God for health for our family, for rain, for anything. Nowadays people do not pray, do not ask and... are not given!

How should we join both hands to set free our bodies in the quickest way? Radiesthetists discovered that the male left hand is (-), the right one (+), and the reverse with the woman. As well as that, each finger is a pole as shown below:



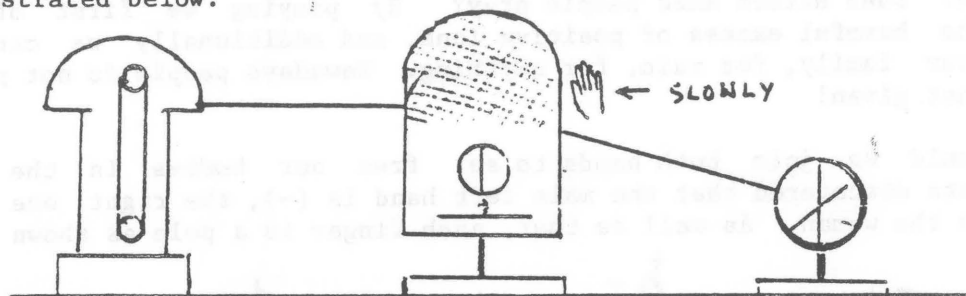
Joining the thumbs, the forefingers and so on, we connect our little poles and thus set free our bodies. Watery veins would not be so harmful if positive ions penetrated into our bodies and left them immediately, but they do not, they accumulate and poison us. Thanks to the short-circuit in our organisms we emit positive ions back into the atmosphere. The priests I talked to were shocked when they learned what the main purpose of praying was. This gesture is not restricted to the catholic or christian religion but is well known all over the world. Yogis sitting still for hours keep their hands open to symbolize their peaceful attitude, and at the same time they join the thumbs and forefingers, letting positive ions escape back to the atmosphere through the shorted little poles as shown below:



A hundred years ago when people danced, they did it in pairs holding hands. The man caught with his right hand his partner's left hand and with his left, the partner's right, thus closing the circuit. Their potentials became level. The person who slept in an unprotected place transmitted positive ions to the other who observed all the religious rules and consequently got rid of positive ion excesses very quickly. So even through the dancing people used to help each other, something impossible at a disco where people dance separately.

Here's another example. A boy walking with his girl-friend holds his right hand round her waist and with his left hand he clasps her left one. Such a configuration makes two poles short: the male left hand (-) and the female left one (+). After a several hours walk they unconsciously liberate their bodies of positive ions. There are people who go to church once a week or even more, and there they are forced by the mass ceremony to join both hands. This purifies their organism and after leaving the church they feel lighter. Besides it is no coincidence that old churches were built along the line E-W, and the altar was always situated to the east.

Now, I would like to describe an interesting experiment which I carried out with a physics teacher. It is so simple that everyone can perform it by themselves. The scheme is illustrated below:



Setting in motion a Van de Graaff oscillator connected with an electroscopes inside a Faraday grid and with an outside electroscopes, it appears that the inside one does not electrify itself, whereas the leaves of the outside reflect. Approaching either hand to the outside electroscopes and touching it, we discharge it. When we approach our left hand to the Faraday grid, we can see the leaf hang loose, but when we approach our right hand, (the male hand) the leaves deflect or will not move, i.e. if the electroscopes is positively charged. Charges of the same sign repel each other.

In conclusion, let me concentrate on reradiators. I know all the reradiators used in Poland and do not like them. At work I use my own ones, models which I took from old books, and which have been used from antiquity. I possess screens of various radii from several meters to several score meters, even of 360m. For some years the effectiveness of my reradiators has been tested by the tenants of the houses I secured, and here are just three examples:

1. A lady, 60, had been taking sleep-inducing drugs for 20 years. After testing the place where she slept I discovered a crossing of three watery veins, among them two radioactive. I secured the place. The lady began reducing the drugs and after a month she gave them up completely.
2. A young married couple, both 30 years old - the man was the owner of the flat. His mother had died of cancer 15 years before; his son, two months before my visit, had a nervous fit (he lost consciousness, tried to commit suicide and after a great dose of psychotropic drugs he regained his balance). Looking for the reason behind these events, the married couple asked me to help them. After testing the flat it appeared

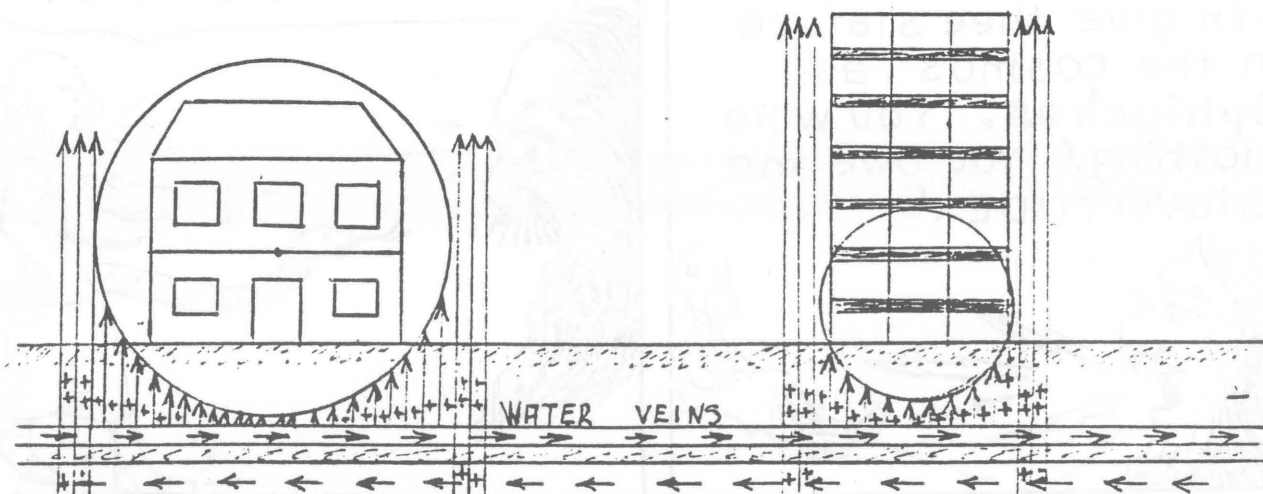
that the couple slept in the same bedroom the parents had used and even in the very same place, the place where I found a crossing of four watery veins, among them two radioactive. I secured the flat. Because the flat was to be overhauled in two weeks time I removed the screens and the owner immediately began to feel depressed. After completing the repair I fixed the insulator again and once more everything was back to normal.

3. A man, 44, with cancer of the lungs. Here was a crossing of four veins, three radioactive. The situation was not able to be helped.

There is uncanny convergence; incurable diseases always occur in places intensively irradiated. frequently by naturally radioactive veins. What is the origin of natural radioactivity? We extract hard coal which contains 40-70% of carbon and the rest are different minerals containing radioactive elements. Next the coal is burnt, to be exact the carbon is, the rest is stored at slag dumps. Then the rains wash away radioactive elements under the ground and they penetrate to watery veins which in turn spread them everywhere. Other factors are mountains of phosphogypsum, chemical chimneys, etc. My reradiators (insulators) not only neutralize ions (+) and the ones emitted by electrical devices such as refrigerators, radios, TV sets, computers -but they neutralize radioactivity as well, and what is more, they themselves emit WHITE COLOUR of various ranges. The radius of reradiators are different, from 6 - 12 - 24 -72 m up to big ones of 360 m.

My reradiators have been tested by the tenants of the houses I secured for several years of my practise; for instance, permanent headaches stop completely immediately after fixing reradiators, people wake up fresh. At my work I have met seven people (5 women and 2 men) exceptionally sensitive, who immediately felt the influence of the reradiators. In hospitals reradiators are needed most, people stay there around-the-clock, therefore insulators should be fixed first of all in hospitals, kindergartens, nurseries, etc., The people who stay there are more susceptible to diseases so they need better protection, and reradiators emit the COLOUR WHITE - the healer's colour.

Such a situation is represented by the picture below:



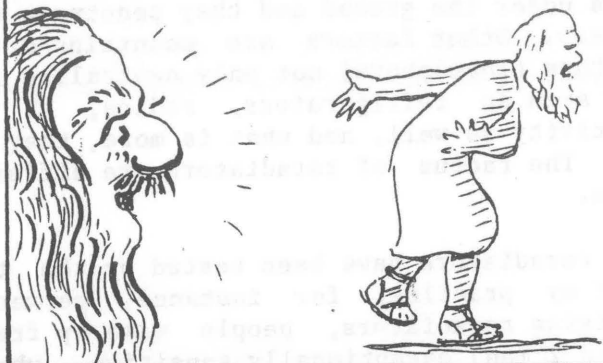
Perhaps thanks to this article I shall find somebody who would like to begin producing my reradiators in the U.S., on terms acceptable to me, of course.

The story of the 13th Astrological Sign,
as told by Dr. W.G. Reimer and Art Yensen.

Awaken thou, you have
slumbered eons enough
A decade ago I sent
thee a zap of colossal
energy to awaken thou
and you heard me not.



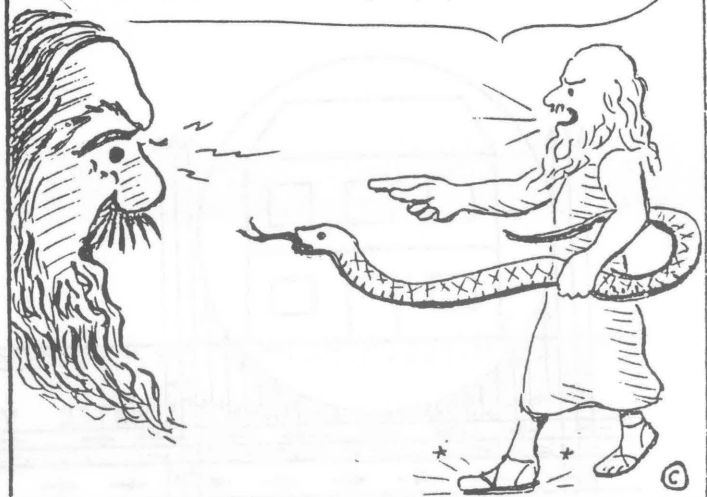
Leave me be, you and your
bolts of lightning and fire
beards. **YOU ARE**
RESPONSIBLE for the
mess I'm in!



HA! you quere my
actions! I took thee
from a mere mortal and
dith give thee stature
in the cosmos as
Ophiuchus. You were
nothing! You owe me
GRATITUDE!



GRATITUDE!
ALMIGHTY ZEUS
take leave of me!



To be continued...

Clips, Quotes & Comments

By Tom Brown

SOLAR UPDATE - IS THE SUN HOLLOW?

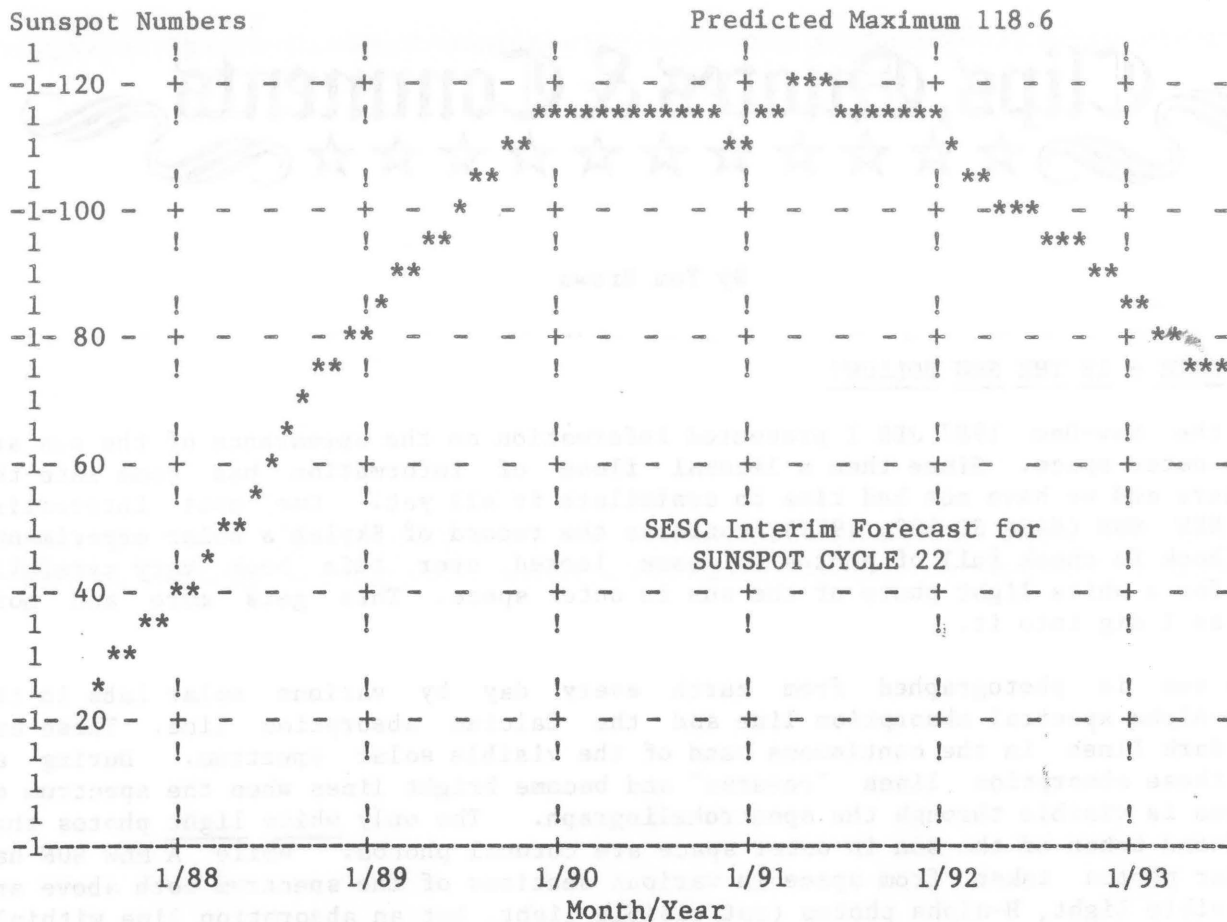
In the Nov-Dec 1987 JBR I presented information on the appearance of the sun and stars in outer space. Since then a literal flood of information has come into the office here and we have not had time to assimilate it all yet. One most interesting book, A NEW SUN (NASA SP-402, 1979), contains the record of Skylab's solar experiments and the book is chock full of photos. I have looked over this book very carefully looking for a white light photo of the sun in outer space. This gets more and more curious as I dig into it.

The sun is photographed from earth every day by various solar labs in the Hydrogen-Alpha spectral absorption line and the Calcium absorption line. These are usually dark lines in the continuous band of the visible solar spectrum. During an eclipse these absorption lines "reverse" and become bright lines when the spectrum of the corona is visible through the spectroheliograph. The only white light photos that I have found taken of the sun in outer space are coronal photos. While A NEW SUN has many solar photos taken from space in various sections of the spectrum both above and below visible light, H-alpha photos (not visible light, but an absorption line within), and white light photos from the ground, there are no white light photos of the sun taken from space available to the public. It seems as though there is still a mystery as to what the sun looks like to the human eye in outer space. No photos of stars taken from space are available either. Seems to me that a priority of space research would be to see what it looks like above the atmosphere.

Another curious aspect presented in the book are the x-ray photos of the sun. The corona can be seen in the x-ray range. These photos show a large gap at the poles and a new phenomenon was discovered during the Skylab experiments--coronal holes, large gaps in the corona. Whatever segment of the spectrum is being viewed it is quite apparent that the sun is hollow. The book gives a schematic of the theorized interior of the sun, but openly admits that no one has seen beyond the photosphere. That is the layer we see and contains the holes known as sunspots. It is quite clear in sunspot pictures that the underlayer is completely dark and that the sunspots are gaps in the photosphere. What kind of "fudge factors" do the scientists need to imagine that the sun gets hotter and more intense as one delves deeper into the interior? Modern scientific religion can make one blind during the day with their eyes open.

SOLAR CYCLE 22 PREDICTIONS

There are various methods for predicting the activity of an upcoming solar cycle. Below is a graph showing the possibilities of Cycle 22. This is courtesy of the National Oceanic and Atmospheric As., Space Environmental Services Center, NOAA-SESC. The researcher is listed as Seargent. The values charted and tabulated are predicted smoothed monthly mean sunspot numbers for the designated months.



VIEW FROM THE BORDERLAND

As the plant grows through its various stages of metamorphosis so does the living surface of the planet. Humanity arising through its stages has come to the point we are at today. We are not at the end of time, but we seem to be at the end of a stage of development on earth. (The de- in development relates to the degenerate, dero, de-field of words in Shaver's Mantong hypothesis.) The developing societies on this planet are relying more and more on devices to do work which was once done by hand. Electricity has allowed for us to create artificial environments. What relationship does electricity have to the evolution of humanity's soul?

Light has two poles, the red-yellow and the blue-violet. This can easily be demonstrated with a prism. Electricity also has two poles. When electricity was first discovered by our developing society (the Greeks knew of lodestone-magnetism and amber-dielectricity) several hundred years ago it was the dielectric side that was first experienced. We think of that side as static, but it is the most dynamic side in reality. Now when a person thinks of electricity they think of electromagnetism, the opposing pole. Eric Dollard has demonstrated the relationship of electricity to light in a very simple experiment. First he pulses electricity (purchased from the utility company) through a large induction coil and the discharge is seen as reddish and the discharge wire gets red hot. The dielectric side is demonstrated by pulsing electricity into a capacitor. The discharge is blue, the discharge surfaces remain cool, and the noise output from the discharge is much louder per unit of input than the electromagnetic. This demonstration is on our Free Energy video. (See back cover.)

The Light Ether provides the shape in space which relates to the eye and to the sun. Electricity is listed in some Anthroposophical literature as being the subsensible counterpart to the supersensible Light Ether. George Unger, in his book ON NUCLEAR ENERGY AND THE OCCULT ATOM, (C) 1982, (\$3.95) provides the following chart:

			Life- Meaning- Ether Atomic-
		Chemical- Number- Ether Sound-	
	Light Ether		
Warmth Ether	Gaseous Condition	Fluid Condition	Solid Condition
	Electricity Lucifer	Magnetism Ahriman	Third Force Asuras

The forces that we use today to seemingly make our lives better are actually fallen ethers. The inner soul force of man is now externalizing into technology. This is a necessary stage of development here on earth and it is in our methods of using these forces that we either evolve or devolve. The Third Force is not taken as nuclear energy by Unger, but he indicates that it is the "tip of the iceberg" of the coming force which will have the ability to destroy this planet if not dealt with properly. There is more and more information appearing showing the harm that currently used methods of propagating electricity inflicts on living organisms. This is because the electromagnetic pole of electricity is predominant in common use. The dielectric pole, which is in relationship with orgone energy is more benign to the body.

Eric has indicated that a Tesla Magnifying Transmitter produced magneto-dielectricity, which is electricity in its true form. Thus over the last few hundred years we have observed what electricity truly is, but it is only by combining the understandings from the two poles of the period of knowledge covered that we find the most beneficial form. As we bring the two poles of light together we get green, the balancing color of life. As the light ether is polar in nature so is its reflection in the subsensible forces, electricity.

Thus we may gain a most interesting view of the works of Nikola Tesla. Tesla's greatest achievement would have been the completion of his wireless broadcast tower at Wardencliffe New York. The wireless broadcast is based on the understanding of the dielectric pole of electricity and in all probability we would not have the present dangers from electrical propagation if the Tesla system were in operation today. In fact we would have a much different world today. The zeitgeist of the time stopped Tesla. Tesla himself said that his work was not suppressed, but that the time was not right for it. It is most important to note that our present computer society would not be in existence were we to use the wireless power mode. The whole basis of electronics, the silicon switch (diode, transistor, etc.) fail when brought near high frequency. We have seen an electronic camera go crazy near high frequency apparatus and my watch went blank by getting it near an active multi-wave oscillator antenna.

ELECTROTHERAPEUTICS

As our usage of the fallen ethers progresses through time we discover different uses for the force. Electrotherapeutics is a most curious instance of this. Electricity--the magic force that can heal. The early 1900's were witness to this with the various electrical devices appearing as listed in Jorge Resines' informative article in this issue. This was also the time of birth of the Electronic Reactions of Abrams which evolved into the Ruth Drown type of radionic instruments. Today electrotherapy is moderately tolerated (with TENS units and such) but the Lakhovsky MWO, Violet-Ray Massager, and similar apparatus are forbidden to the health practitioner. Forget whether they work or not, they could not be easily controlled by the monopolistic forces controlling the medical world.

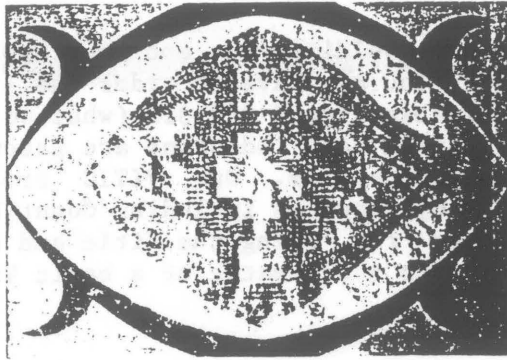
Trevor Constable has pointed out that the healing force is most probably the etheric force rushing to suppress the electromagnetic activity. The true healing force is the soul force and it is more beneficial to us in its supersensible form rather than its subsensible form. Ruth Drown's work as well as the whole field of radionics offers advancement beyond the mechanistic thought field of electrotherapeutics. Computerized radionics is now appearing. I have been told that these units are "state of the art." It is important to fully support research into computerized radionics if results are being obtained but a clear overview of the subject is necessary in order to progress properly. Radionics is more than just working with physical instrumentation that will do "weird things" such as detect and manipulate energies across the globe (and as Hieronymous has demonstrated -- through outer space as well). Radionics deals with the energies of manifestation. Matter is one pole of manifestation, the etheric is the other. Radionics functions in the spectrum formed by the two poles and it is thus that the physical instrumentation is a preliminary stage on a path of spiritual growth. Can a computer be the "state of the art" of spiritual growth?

OMINOUS OMNI

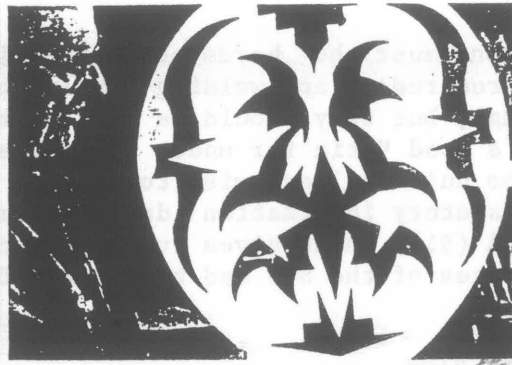
The November 1987 issue of Omni Magazine is one of the worst travesties of science to roll off the presses in recent years. Robot police? -- sure they could help keep us in line. Rebels -- afraid of the future of science? -- shoot 'em. Electricity in medicine? -- patently absurd. Yup, its all there in the magazine of techno-facism. Perhaps what riles me the most is their denigration of the works of Dinshah P. Ghadiali who was certainly one of the most incredible researchers of this century. Even though there are decades of documented case histories and many people worldwide still use the Dinshah system (because it works, not because they are cultists as the article suggests) Omni ignores the facts and pumps the medical oligarchy's propaganda line. Wilhelm Reich? Why didn't he push that crazy orgone box for healing? Thank heavens the government stopped us from that madman. Of course the science that Omni presents is merely puff to fill the pages between the booze and honcho vehicle adds. What karmas they must incur by misguiding the honest searcher for scientific truths....!!

TWO DIMENSIONAL SCULPTURES

Veteran Borderland Researcher Gaston Burrige has given us the gift of a Two-Dimensional Sculpture he has created. Thank you, Gaston! This is a beautiful energy generator crafted in metal. It is titled WAO-DAH-AH-FEE-AH (means Energy Generator) and I wish I could run a picture of it here for all to see. It has certainly brought some excellent energies with it and continues to generate more. Here are a couple photos from an newspaper article about Gaston and his artwork.



A finished work.



A poster board cut-out is used as a pattern for cutting the delicate metal.

If you would like a Two-Dimensional Sculpture (prices range from \$250 to \$300) the address is: Gaston Burridge, PO Box 1468, Payson AZ 85547. Gaston has written innumerable articles, many published in the Borderland's Round Robin in the 1950's.

SCREWY CLOUDS

"While driving through the San Geronio Pass on Highway 10 on the way to Palm Springs, California in the Spring of 1987, I chanced to look towards the north. I was astounded to see, over 12,000 foot Mr. San Geronio, two helix clouds. They had their large ends to the east, & they wound down to their tips in the west. They were the same size, one lying above and slightly behind the other, and they appeared to be from 5-10 miles long.

"They resembled the picture of a 'secondary vortex' on page 545 of OAHSPE, except my two were geometrically perfect -- almost as if they had been produced by a machine..."

Richard Horton, Banning, Cal.

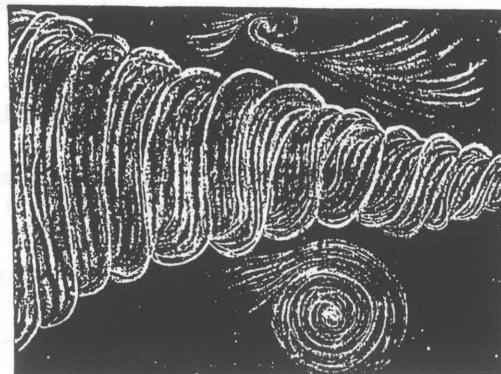
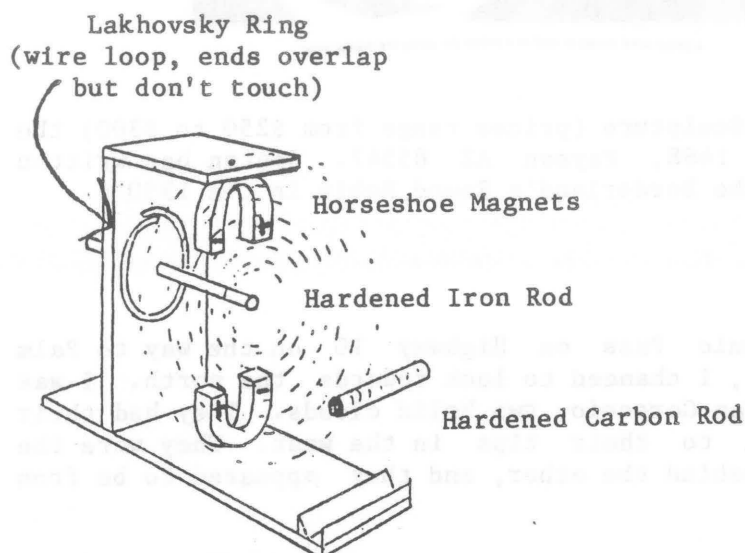


PLATE 26.-SECONDARY VORTEX.

VITIC

The sale of our VITIC devices has been temporarily suspended but we plan on making them available again when possible. A VITIC update is in the works for an upcoming Journal. We have had inquiries on where to get the carbon rods from and the best magnets. Many people want to know where to get the strongest magnets. In this writers experience with the vitic energy it has been found that the carbon is the dominant substance. (A good analogy would be carbon=dielectricity, magnet=electromagnetism.) Carbon energizes the nervous system when held in the right hand and depresses it in the left. The magnetism draws the vitic force through the body. Strength of the magnetism will of course influence the amount of flow, but we have seen that the coherence and quality of the magnetism is more important. I use a piece of lodestone - a small but natural field. It cost me \$2 in a rock shop.

The carbon must be hardened, which is what welding rods and arc lamp rods are. They can be procured at any welding supply shop. You may have to order the 1" diameter rods (12" long), but they should be easily obtainable around \$12-\$15 (what we've paid). You now have a good Vitic for under \$20. The carbon and lodestone are gateways which will allow the universal energies to be used by your system. Our VITIC Brochure (\$5) contains explanatory information drawn from many sources including Count Walewski's CAUCASIAN YOGA (\$15) which gives full instructions for using the Vitic and drawing on the cosmic forces of the Sun and the Moon. Below is a schematic of a basic Vitic.



VITIC

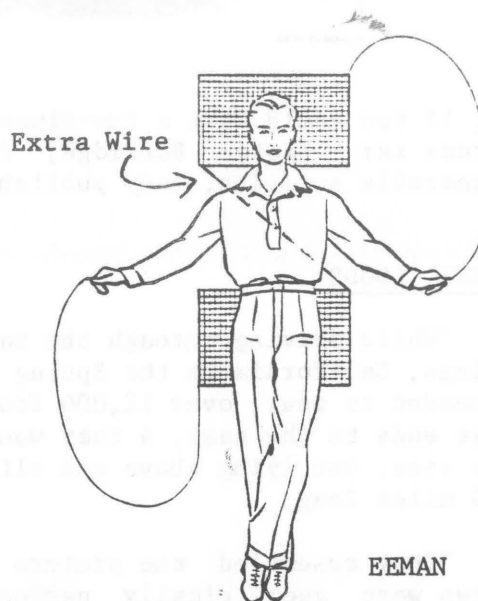


FIG. 1.—One subject in relaxation circuit, showing copper gauze mats and wire connections.

EEMAN UPDATE

L.E. Eeman's work is experiencing an upswing of interest. Health Research has just reprinted the Borderland copy of COOPERATIVE HEALING (which has been selling well -- \$27.50) and researcher Leslie Patten is finishing up a book on Eeman's life and work for which we anxiously await. Peter Lindemann has been researching Eeman's work for about 10 years now and he has come up with some excellent insights which will be published in a future Journal. What we'd like to cover here is how to build a set of Eeman screens as we are not supplying them at present. Our brochure EEMAN SCREENS -The Balancing Circuit (\$4) gives the basic principles of routing the human vital energy along wires to get around energy blockages in the human system.

The basic circuit as given in COOPERATIVE HEALING is to take two 12" square pieces of copper screen. Each screen has one 6' strand of copper wire connecting it to a copper handle. The picture shows the arrangement of these two screens. Peter Lindemann pointed out to me that Eeman eventually connected the two screens with a short length of wire and he felt this was the optimum circuit. There is a direct connection from one hand to the head screen to the sacrum screen to the other hand. Peter also found that the size of the screens could be reduced to 6" square without cutting down on the efficiency of the circuit. Screens smaller than 6" didn't seem to transfer the force well. Also the connections should be tight and not loose for maximum effectiveness. They can be silver soldered or bolted together with small screws. Remember, this is your personal energy you are working with, you will want to be in the optimum circuit.

BSRF UPDATE - Here we go into Volume 44 of the Journal and Borderland is going strong and gaining a wider base of activity. We are working on getting an energy lab going full time. We just issued the FREE ENERGY VIDEO listed in this Journal, which we admit is an amateur production as far as video goes, but the equipment shown is some of the most amazing energy innovations of our times. We are issuing it to stimulate experimentation and to fund further videos on this and other Borderland subjects. The mail order side of Borderland (the side that pays the bills) is growing and we are getting more hard to find books, videos, tapes and equipment available at discounts to members. We are open to suggestions on new material to carry.

* Eric Dollard has tendered his resignation from Borderland Sciences to one-pointedly pursue his research. We thank Eric for his help and his promotion of Borderland in his public appearances. Eric is purely a researcher and is not interested in corporate paper shuffling (I don't blame him). We will still be reporting on Eric's groundbreaking research into the etheric aspects of electricity and hope to soon have a set of color photos available showing organic forms in plasmas around high frequency apparatus as well as further videos of his work. The International Tesla Society is taking the papers of Eric's we have published and are editing them into a hardbound edition available soon. Eric is a brilliant scientist and we fully support his work and wish him well.

* The remaining board met on November 28, 1987 to vote to fill the vacancy left by Eric's resignation. Peter Lindemann was chosen and we called him to notify him and he accepted. Peter has been fully supportive of Borderland activities since our first contacts with him in late 1985, as well as having contributed to the files since the 70's. He has pursued research into radionics and working with subtle energies such as the Eeman circuits and the Vitic. We are already working with Peter in several areas of research and feel that his involvement with Borderland will be of benefit to all.

* Thanks for all the letters and information. There are not enough hours in the day to answer all the mail. I wish it were possible to know the answers to all the questions I get asked each week. My desk is awash in piles of paper. We focus on filling orders, doing the Journal and preparing more material for publication. In between we try to do some actual research. We are working hard to make Borderland Sciences Research Foundation an important waystation for those seeking the source of true reality on their voyage through space and time. Check out what's available in our Journal and catalog. When you are done with them, then ask for more...thanks!

* We are going to be issuing more videos on Borderland subjects as well as interviews with the researchers who are pioneering the etheric realms of science.

* Book prices listed in CQC do not include postage. Add \$2/first book, \$.50 additional. Double for first class. Californians add 6% state sales tax. Foreign orders please inquire for postage rates--It is hard to figure a general rate.

BOOKS FOR LISTENING UPDATE - The Journal of Borderland Research is now available on cassette tape for \$40pp per year in the US (foreign inquire). Back issues of the Journal from present back to 1969 are available on tape also for \$7.95pp each or one year or any six issues for \$40. A listing of back issues is in the works. We also are lowering postage on Borderland books on tape. Postage is now \$2 for the first 5 tapes and \$.25 each additional. (Foreign inquire.) Books For Listening will read any book onto tape for you as long as the copyright is expired or in your possession. We will soon be issuing a large catalog of available books on cassette. B.F.L. is also working with BSRF to re-release the lecture tapes of Riley Crabb, 25 years worth. Great folks!

CONTACTS - Crossroads for researchers. Listing is free, keep in touch with other researchers and sources. Send a S.A.S.E. or a few bucks when responding.

* ENERGY UNLIMITED will go for one more issue and then Walter Baumgartner will make the transition to a newsletter titled CAUSES. Walter's new address is: ENERGY UNLIMITED PUBLICATIONS, PO Box 3110, Laredo TX, 78044.

* BOB MAILHOT, 1721 Walnut Ave, Las Vegas 89101. Will exchange information with others on, Electromagnetic Healing, MWO, Radionics, Geomagnetism, Hieronymus, Drown, De La Warr. WILL answer letters with info of their own. (Bob has sent BSRF a nice package of compiled info, thanks!)

* Mr. Guido U. Parisi, FARIND, Corso Giulio Cesare, 155-10155 Torino, ITALY. Interested in receiving proposals on new technologies, devices, apparatus, research papers, books and anything else related to advanced technologies. A consortium is under formation which will be financing the development of the project as well as a manufacturing facility in Italy. Offered partnership in the new Society for rights related, consulting contracts and a royalty on products manufactured. Also clips and articles on related items can bring "fees" if with enough information to contact inventors and come to a contract with them. Open minded to any kind of proposal, also distribution in Italy of advanced products considered in parallel with main project. Any offer will get deep consideration and evaluation and answers will be guaranteed.

* FUTURE MEDICINE - U.K. Wanted! Revolutionary concepts in the field of psychotronics, crystal laser, kirlian photography, image reproduction, etc. Write: FM-UK, 19 Wellfield Avenue, Muswell Hill, London, ENGLAND N10 2EA

* THE KRONIA GROUP, 12001 S.W. Steamboat Dr., Beaverton OR 97005, is announcing THE CATAclysm: A Monthly Symposium on Myth and Science. Information includes: Velikovsky in Retrospect; Saturn and the Golden Age; The Electro-Gravitic Theory of Celestial Motion; Revising Mesopotamian Chronology; New theories on evolution by celestial catastrophe; Keys to ancient astronomy and the birth of astrology; etc. \$20 registration fee includes first month's issue and monthly notification of topics covered in subsequent issues (which registrants may purchase individually for \$12). Full year \$110. (BSRF is glad to see this information continue.)

* MANKIND RESEARCH UNLIMITED, Inc., 1315 Apple Avenue, Silver Spring, MD 20901, (301) 587-8686. Research source for Kirlian Electrophotography, Electrographic Imaging in Medicine and Biology, Bioelectrophotography - A New Method for Detecting Cancer and Monitoring Body Physiology, etc.

* NOW WHAT c/o Waves Forest, PO Box 768, Monterey, CA 93940. NOW WHAT is the newsletter of unauthorized information. Issue #1 includes info on AIDS and Cancer Cures with Hyper-Oxygenation, Plant Growth Acceleration Methods, Global Reforestation, Airwells: Free Water From the Air. NOW WHAT is quarterly and costs \$10/year, \$3/issue.

* TESLA BOOK COMPANY, PO Box 1649, Greenville TX 75401. This is a new address, (same owner), send \$1 for current catalog. Excellent source for Tesla's actual work.

* THE CRYSTAL VISIONARY, PO Box 566, Milsons Point, Sydney, AUSTRALIA 2061. Phone (02) 407-0294. A well done magazine covering the various aspects of crystals and consciousness-raising for harmony and world peace. Subscriptions: Australia - \$A 10; America - \$US 16; New Zealand - \$A 16; Europe - 12 Pounds. Four issues per year.

FREE ENERGY RESEARCH

A VIDEOTAPE TRIP TO BORDERLAND LABS

Borderland Sciences Research Foundation presents a day in our energy laboratory with Eric Dollard, Peter Lindemann, Michael Knox and other dedicated researchers. We invoke the Borderland concept of the Ether and in this amazing video we will show you that real progress has been made in this field. Borderland has been the nexus for a small group of astute, dedicated scientists and with this video we give their work to the world. Experiments can be reproduced from this video. Here is a beacon to guide the researcher!

All testing is done with industrial standard equipment and can be reproduced in public. We call on all other free energy researchers to do the same. Quality research will help people and now is the time. Dubious claims abound. This work stands in the light of day!

Eric Dollard gives a definition of electricity and demonstrates the decaying electromagnetic side and the growing dielectric side. You will experience the opposing poles of electricity providing a practical understanding of the polar components of electricity now removed from the nebulous realms of theory and brought to the hard reality of the lab bench. Dielectric lines of force will be demonstrated and you will see organic Golden Ratio patterns burned into wood with a Tesla coil playing Johann Sebastian Bach. The actions of lightning and the operation of Tesla's Colorado Springs coil can be better understood with these practical demonstrations. Eric presents his ideas for you to use.

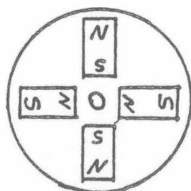
The sun is a great giver of energy and Eric demonstrates a new, more efficient way of charging batteries from photovoltaic cells. This was to be a patent but is now public domain information. Use it!

Peter Lindemann demonstrates his Rotating Parametric Transformer, also known as a Variable Reluctance Generator. Here you can see an operating model, developed by Peter the inventor, and built by his associate Michael Knox. You will see it tested on video by Eric Dollard working at 108% efficiency with watt meters in and watt meters out. This unit has been demonstrated in public and can be done any day. No secrets here. Just real science. Free Energy is not really free, but here are the keys to making it work. Use them!

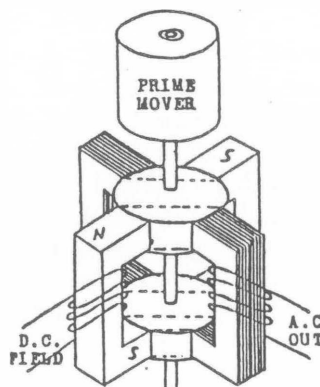
Around 1831 Faraday developed the idea of the rotating disc generator known as "homopolar" generators or in modern times as "n-machines". Peter and Michael demonstrate here an alternating current disc generator. Various experiments are shown which create more questions than they answer. AC waveforms drawn from space are demonstrated on the instrumentation. This AC generator displays the curious characteristic of the wave amplitude being independent of the disc's rotating speed. This is a brand new outgrowth of Faraday's work developed by these Borderland Scientists and we want to see others spreading this technology. By spreading these ideas we feel that we are planting seeds which will grow into a beneficial technology harmonious with our dear planet Earth.

You can support real research and learn at the same time by your purchase of this exciting and revolutionary video. A huge corporation would guard the valuable research on this video as industrial secrets, or shelve it because it would cut into profits. We estimate at least \$10,000,000 worth of commercial material is here. Forget the experts and go with the real workers in the field -- Borderland Sciences Research Foundation.

FREE ENERGY RESEARCH, (C) 1987, 2 hour VHS in color. List Price.....\$39.95
Borderland Members discounted price until March 1, 1988.....\$29.95
Add \$3 P&H for the first video and \$.50/additional. Californians add 6% state sales tax.
BSRF, Box 429, Garberville CA 95440



Alternating Current
Rotating Disc Generator



Peter Lindemann's
Variable Reluctance Generator



Golden Ratio
Discharge

JANUARY-FEBRUARY 1988 JBR,

Page 35

REAL RESEARCH ***** HAPPENING NOW!!!



P.O. BOX 429 ★ GARBERVILLE, CA 95440-0429 ★ U.S.A.

Bulk Rate
U.S. Postage
PAID
Garberville CA
Permit #15

FORWARDING POSTAGE GUARANTEED ***** ADDRESS CORRECTION REQUESTED

SANCTUARY FOREST

Sanctuary Forest is a group of people dedicated to saving a pristine area of old growth redwood trees at the headwaters of the Mattole River in Northern California. The Sanctuary Forest area is a spawning ground for salmon and there has been a restoration project going on for years that will be wiped out if the logging is continued in the area. These people work within the framework of society and through their actions they have come to a successful but curious position. They have bought a portion of the land from the logging company and are negotiating for the rest. The land was bought with loans that have to be repaid and more money is needed for future payments. \$50,000 is due on March 2, 1988. With hard work and dedication these people have taken an important step toward saving a portion of the living earth from development.

The saving of Sanctuary Forest is not the only environmental action taking place but these people are unique in that have sat down at the table to work things out and they have ended up with title to the land. It only makes sense that some logging must take place in this world in order to build, but the line must be drawn somewhere. The old growth redwood forests contain trees around 2,000 years old and many forms of life living in a symbiotic relationship. This is more than a symbolic action, it is a struggle to save living beings unable to protect themselves from the activities of man. If you are able to help financially the address is: Sanctuary Forest, PO Box 166, Whitethorn, CA 95489. Mother Earth has given you life -- how about giving her a helping hand when she needs it?